



2015

# NETWORK INFRASTRUCTURE PRODUCT GUIDE



# From the Edge of Nowhere to the Middle of Anywhere

Where does *your* network need to go?

**B+B SmartWorx is a company of engineers, technicians and precision manufacturers. We are committed to bringing to market a full spectrum of best-in-class networking solutions and data communications equipment that are easy to buy, easy to install and - more importantly - easy to use.**

For more than three decades, B+B SmartWorx has engineered and manufactured rugged, reliable networking communications products for LANs, WANs, and demanding environments.

The demand for bandwidth has propelled us to offer products not only offering Fast Ethernet, but Gigabit and 10G, while supporting a variety of Protocols. The capability of offering management on many of our products allows the devices to be configured and monitored remotely.

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## PRODUCT WARRANTY & PRICING

All products carry a limited-lifetime-warranty; refer to warranty statement on website and/or product documentation.  
Prices are subject to change without notice.  
All products meet UL/CSA/CE certification.  
All products meet RoHS-2 and WEEE certification.  
All products are TAA Compliant. B+B SmartWorx supports GSA contract/pricing.  
Fiber products meet Class I eye-safe laser.



# ETHERNET SWITCHES, ROUTERS & EXTENDERS

EXTEND YOUR INDUSTRIAL NETWORK TO THE EDGE

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# ACCESS AND CONTROL AT THE NETWORK'S EDGE

As networks get more complex and specialized, B+B SmartWorx works harder to make networking easier for you. Our products help customers access their data information and control equipment – whether nearby or at remote distances. We provide a broad selection of rugged and reliable Ethernet devices designed with the most demanding industrial applications and environments in mind.

- *Energy & Remote Powering*
- *Alternative Energy Sources*
- *Water/Wastewater Management*
- *Government/Defense*
- *Telecommunications/Enterprise IT*
- *Security/Camera Surveillance*
- *Building Control*
- *Instrumentation/testing*
- *Transportation*

## WIRED ROUTERS

### ERT300 series - Spectre RT

- NEMA TS1 & TS2 rated for traffic control equipment
- VPN security - IPsec, OpenVPN, LP2T
- Firewall support
- NAT/PAT address & port translation
- SNMP management
- Wide temperature: -40 to 75°C

### XR5i v2 series

- VPN security - IPsec, OpenVPN, LP2T
- Firewall support
- NAT/PAT address & port translation
- SNMP management
- Wide temperature: -40 to 75°C

## UNMANAGED PoE+ SWITCHES

### ESWP205x & ESWG206x series

- Unmanaged PoE+ switch solution
- Advanced PD detection & protection
- PoE+ (30W) per port
- Wide operating temperature -40 to 85°C
- 24VDC redundant power inputs
- SFP slots for MSA compliant Fiber
- Legacy PoE support
- Heavy industrial certified - Level 4
- Remote reset function
- Rugged IP30 enclosure

## UNMANAGED SWITCHES (continued)

### ESW100 series & ESW200 series

- **Class 1 Division 2 rated**
- 5 and 8 port unmanaged switches
- IEEE 802.3, 802.3u, IEC802.3x, Level 3 61000-6-2 EMC
- IEC 60068 (shock, vibration, free fall)
- Standard operating temperature: -10 to 60°C
- Fiber distances: 2km (multi-mode) and 20km (single-mode)
- Redundant power inputs: 12 to 36 VDC, 10 to 24 VAC
- 10/100M, full/half duplex, MDI/MDI-X (auto-negotiate)
- 2K MAC addresses; Broadcast storm control
- Industrial IP30 DIN rail case (6 panel mount options)
- ESW100 series:
  - Ultra compact design, less than 25mm (<1") wide
  - LC fiber port options
- ESW200 series:
  - Class 1/Division 2 options; NEMA TS2 options
  - ST, SC single and multi-mode fiber ports options
  - Wide temperature options, -40 to 75°C (-T models)
  - 12 to 36VDC and 24VAC capable

### EIR400 series

- **Class 1 Division 2 rated (#EIR408-T)**
- 5 to 18 port, unmanaged Gigabit (1000Base) Ethernet
- Input voltage: dual 12 to 48 VDC, reverse polarity protection
- Power connection: removable terminal block
- Fault output: relay output
- Fiber options via SFP modules
- Wide temperature: -40 to 75°C
- NEMA TS2 options

### **NEW!** ESWP205 series, EIRP300 series, EIRHP305-T,

### **NEW!** ESWG206 series, EIRP400 series

- **Class 1 Division 2 rated (#EIRHP305-T, #EIRP305-24V-T)**
- PoE (15.4W and 25.5W options) unmanaged switches
- Gigabit options for high throughput, high bandwidth
- Rugged IP30 case, DIN or panel mount
- Dual power inputs and alarm output
- Wide temperature: -40 to 75°C (ESWGP206, -40 to 85°C)

## MANAGED SWITCHES

### **NEW!** ESWG5x series

- Managed PoE+ switch solution
- Advanced PD detection & protection
- PoE+ (30W) per port
- Wide operating temperature, -40 to 85°C
- PoE+ (30W) per port
- 24VDC & 48VDC redundant power inputs
- SFP slots for MSA compliant Fiber
- Legacy PoE support
- Port based VLAN / 802.1Q Tag VLAN
- RingOn redundancy < 15ms
- Dual ring redundancy
- Power supply derating curve integration
- Heavy industrial certified - Level 4
- Remote reset function
- Compact rugged IP30 enclosure

### EIRP600 series

- Managed PoE Gigabit switches (10/100/1000 Mbps)
- Gigabit speeds for high throughput, high bandwidth
- Power-over-Ethernet (PoE), PSE ports power IEEE802.3af PD devices
- SFP ports for network flexibility
- Auto MDI/MDI-X
- Dual power inputs and alarm output
- Wide temperature (-T models)
- Rugged IP30 metal DIN rail or panel mount case
- NEMA TS2 options

### EIR600 series

- Gigabit (1000Base) Ethernet managed switches
- IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX
- Redundant ring recovery time: <20ms
- Redundant dual power inputs and relay alarm output
- IGMP snooping with query mode
- Port based VLAN 802.1 Q Tag VLAN
- Auto MDI/MDI-X and Auto-negotiation
- Store-and-forward switching architecture
- Secure configuration, management, operation via web, SNMP or CLI
- Wide temperature
- NEMA TS2 options

### ESW500 series

- Managed 6 to 16 port Ethernet switches
- IEC 61000-6-1, IEC 60068 (shock, vibration, free fall)
- Temperature: -10 to 60°C
- Wide temperature: -40 to 75°C (-T models)
- Gigabit options with copper and SFP combination ports
- Multi-mode, single-mode SC fiber port options
- IGMP snooping with query mode
- Port based VLAN / 802.1 Q Tag VLAN
- Power inputs & relay alarm output
- 12 to 36VDC (10 to 24VAC for ESW508 & ESW516 series)
- NEMA TS2 options

## POE SPLITTER

### EPSG202

- UL 508
- 10/100/1000T for PoE in and data out
- Output power up to 25W at 24VDC
- Wide temperature: -40 to 75°C
- Power isolation and short circuit protection for power output
- Auto disconnect for over-power voltage input
- 3k VDC EFT power line protection
- 6k VDC ESD Ethernet protection

## ETHERNET EXTENDERS

*Extender Ethernet over existing coaxial cable or copper wire.*

### EIR-EXTEND-C, EIS-EXTEND-C series

- Industrial grade, hardened coaxial extender (EIR-EXTEND-C)
- Commercial grade, coaxial extender (EIS-EXTEND-C)
- BNC or F-Type connector line port link
- 10/100Base TX (TX) RJ-45 Ethernet port
- IEEE 802.3 10BaseT and IEEE 802.3u 100BaseTX compliant
- Status LEDs for monitoring and connection

### **NEW!** EIS2-EXTEND & EIR2-EXTEND Hardened series

- Industrial grade, 10/100Base-TX hardened extender
- Extend Ethernet over common copper, telephone, Cat5e
- IEEE 802.3 10BaseT and IEEE 802.3u 100BaseTX compliant
- Stand-alone device or install in 19-inch rack chassis (# EIS2-EXTEND)
- Wide temperature (# EIR2-EXTEND)
- Desktop, DIN rail option (# EIS2-EXTEND); DIN rail (# EIR2-EXTEND)

### EIRP-EXTEND

- PoE+ ports for cameras and PoE devices
- Status LEDs for monitoring and connection
- Redundant wide voltage inputs; wide operating temperature
- EN61000-6-2 EMC heavy industrial standards
- IEC600068-2-27 (shock) and 600068-2-6 (vibration) tested
- NEMA TS1/TS2 requirements for traffic control equipment

## Class 1/Division 2 Certified For Hazardous Locations

Switches (ESW100 series, ESW200 series)  
Gigabit Switch (EIR408-T)  
PoE Switches (EIRHP305-T, EIRP305-24V-T)



For applications requiring Class 1/Division 2 certification, B+B SmartWorx has a range of connectivity and communication solutions designed to operate in hazardous environments.

- see p60 for a complete listing of C1D2 products.

# PRODUCT FAMILY COMPARISON

## ETHERNET SWITCHES, ROUTERS & EXTENDERS



Available: NATAM



Available: EMEA, LATAM



MANAGED ETHERNET ROUTERS			UNMANAGED ETHERNET SWITCHES		
PRODUCT FAMILY	Industrial LAN Wired Routers	Industrial LAN Wired Routers	Ultra-slim Industrial Ethernet Switches	Compact Industrial Ethernet Switches	Gigabit Industrial Ethernet Switches
PRODUCT SERIES	ERT31x series	XR5i v2 series	ESW100 series	ESW200 series	EIR400 series
Function	Managed	Managed	Unmanaged	Unmanaged	Unmanaged
10/100 Base	✓	✓	✓	✓	✓
Gigabit					✓
PoE					
<b>Ports</b>					
Total Port Count	2	2	5, 8	5, 8	5, 8, 10, 18
Built-in Fiber Option			✓	✓	
SFP Fiber Option					✓
<b>Specifications</b>					
Temperature - Low / High	-40°C / +75°C	-40°C / +75°C	-10°C / +60°C	-10°C / +60°C	-40°C / +75°C
Wide Temperature Option	Standard	Standard	Standard	-40°C to 75°C	Standard
Power DC- Low / High	10 VDC / 30 VDC	10 VDC / 30 VDC	12 VDC / 36 VDC	12 VDC / 36 VDC	12 VDC / 48 VDC
Power AC			10 to 24 VAC	10 to 24 VAC	
Dual Power Inputs			✓	✓	✓
Relay Outputs					✓
Mounting Options	Standalone or Desktop (DIN rail option)	Standalone or Desktop (DIN rail option)	DIN Rail (panel mount option)	DIN Rail (panel mount option)	DIN Rail (panel mount option)
NEMA TS2 Options	✓			✓	✓
Class 1 / Division 2			✓	✓	EIR408-T
Page (models)	12	12	12	12	12



ETHERNET EXTENDERS			
PRODUCT FAMILY	Industrial Hardened Ethernet Extenders	Commercial Ethernet Extenders	Industrial Ethernet Extenders
PRODUCT SERIES	EIR-EXTEND-C series	EIS-EXTEND-C series	EIS2-EXTEND <i>New!</i>
Function	Industrial Grade	Commercial Grade	Commercial Grade
Unmanaged	✓	✓	
Managed			✓
Extender Type	Coaxial	Coaxial	Copper
<b>Specifications</b>			
Maximum Distance/Resulting Speed	2600 m/1-5Mbps	2600 m/1-5Mbps	2600m/1Mbps
Resulting Distance/Maximum Speed	200m/85Mbps	200m/85Mbps	300m/100Mbps
Temperature - Low / High	-40°C / +75°C	-10°C / +60°C	-10°C / +60°C
Wide Temperature	✓	✓	
Power - Low / High	12 VDC / 32 VDC	12 VDC (power supply included)	12 VDC (power supply included)
Dual Power Inputs	✓		
Extender Port	BNC or F Style	BNC or F Style	RJ-11
Extender Port Count	1	1	1
Ethernet Ports	1	1	1
PoE Ports			
Mounting Options	DIN rail or Panel Mount	Desktop or Rack Mount	Desktop or DIN rail
Media Chassis		✓ (# EIS-RACK-16)	✓ (# EIS-RACK-16)
Page (models)	13	13	13



**POWER-OVER-ETHERNET SWITCHES**

**MANAGED ETHERNET SWITCHES**

PoE Industrial Ethernet Switches	PoE & GB Industrial Ethernet Switches	Industrial PoE Splitter	PoE Industrial Switches (GB, SFP)	Industrial Gigabit Ethernet Switches	Industrial Ethernet Switches
<b>ESWP205 series <i>New!</i></b> <b>EIRP300 series</b> <b>EIRHP305-T</b>	<b>ESWGP206 series <i>New!</i></b> <b>EIRP400 series</b>	<b>EPSG202</b>	<b>ESW5xx series <i>New!</i></b> <b>EIRP600 series</b>	<b>EIR600 series</b>	<b>ESW500 series</b>
Unmanaged	Unmanaged	Unmanaged	Managed	Managed	Managed
✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓
5	6, 10	2	6, 8, 10, 12, 18	8, 10, 18	8, 16
	✓		✓	✓	✓
-40°C / +75°C (-40 to +85°C, ESWP205) Standard	-40°C / +75°C (-40 to +85°C, ESWGP206) Standard	-40°C / +75°C Standard	-40°C / +75°C (-40 to +85°C, ESWP205x) Standard	-10°C / +60°C -40°C to 75°C	-10°C / +60°C -40°C to 75°C
24 VDC / 48 VDC	48 VDC / 48 VDC	24 VDC / 24 VDC	12 VDC / 48 VDC	12 VDC / 48 VDC	12 VDC / 36 VDC
✓	✓		✓	✓	✓
✓	✓		✓	✓	✓
DIN Rail (panel mount option)	DIN Rail (panel mount option)	DIN Rail (panel mount option)	DIN Rail (panel mount option)	DIN Rail (panel mount option)	DIN Rail (panel mount option)
EIRHP305, EIRP305-24V-T					
12	12	12	13	13	13



Industrial Hardened Ethernet Extenders

Industrial PoE+ Ethernet Extenders

**EIR2-EXTEND *New!***

**EIRP-EXTEND**

Industrial Grade

Industrial Grade

✓

✓

Copper

Copper

2600m/1Mbps

1900 m/1Mbps

300m/100Mbps

300m/50Mbps

-40°C / +75°C

-40°C / +75°C

✓

✓

12 VDC (power supply sold separately)

24 VDC / 48 VDC

✓

RJ-11, Terminal Block

RJ-11, Terminal Block

1

1

1

1 or 2

1 or 2

DIN rail

DIN or Panel Mount

13

13

**Technical Product Assistance**

*At B+B SmartWorx, we still believe in humans answering the phones. And, they are experienced people, not screen readers.*

Technical Support and Field Application Engineers assist in selecting the right product for a network application. Tech Support assists with post-sales installation questions.

Sales and Customer Service ensure orders are filled in a timely fashion.

It takes time, thought and expertise. That translates into savings for the customer, because the right product has been selected making for an expeditious installation.

When you contact B+B SmartWorx, whether by phone, email or chat, you can expect a timely response from a knowledgeable person who cares about you and your project.

North America - Ottawa, IL USA  
815-433-5100  
support@bb-elec.com

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+353 91 792444  
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# ETHERNET SWITCHES, ROUTERS & EXTENDERS

## Ethernet Routers

### Industrial LAN Wired Routers

MODEL #	DESCRIPTION
<b>ERT300 series</b>	
ERT310	(2)10/100 Ethernet, WAN, USB, Digital I/O, DIN Mount
ERT311	(3)10/100 Ethernet, (1) RS-232, WAN, USB, Digital I/O, DIN Mount
ERT312	(2)10/100 Ethernet, (1) RS-232, WAN, USB, Digital I/O, DIN Mount
ERT314	(2)10/100 Ethernet, (1) RS-485, WAN, USB, Digital I/O, DIN Mount
<b>XR5i-V2F series</b>	
<b>- Plastic or metal ("SL") case options; expansion port options</b>	
XR5i v2F set	Base Router, plastic case: (1) 10/100 Ethernet, (1) USB Host
XR5i v2F set SL	Base Router, metal case: (1) 10/100 Ethernet, (1) USB Host, (1) Binary I/O
XR5i v2F ETH set	Router + Ethernet expansion port PORT1
XR5i v2F RS232 set	Router + RS232 expansion port PORT1 & PORT2
XR5i v2F RS485 set	Router + RS485 expansion port PORT1 & PORT2
XR5i v2F MBUS set	Router + MBUS expansion port PORT1 & PORT2
XR5i v2F CNT set	Router + CNT expansion port PORT1
XR5i v2F WIFI set	Router + WIFI expansion port PORT2
XR5i v2F WMBUS set	Router + WMBUS expansion port PORT2
XR5i v2F SDH set	Router + SDH expansion port PORT2
<b>XR5i-V2E series</b>	
<b>- Plastic or metal case options.</b>	
XR5i v2E	Base Router, plastic case: (2) 10/100 Ethernet

## Ethernet Switches - unmanaged

### Unmanaged Switches

MODEL #	DESCRIPTION
<b>Ultra-slimline industrial switches, UL, C1/D2</b>	
ESW105	(5) 10/100 copper
ESW105-ML	(4) 10/100 copper, (1) multi-mode fiber LC
ESW105-SL	(4) 10/100 copper, (1) single-mode fiber LC
ESW108	(8) 10/100 copper
ESW108-ML	(7) 10/100 copper, (1) multi-mode fiber LC
ESW108-SL	(7) 10/100 copper, (1) single-mode fiber LC
<b>Compact industrial switches - UL, C1/D2</b>	
ESW205	(5) 10/100 copper
ESW205-MT	(4) 10/100 copper, (1) multi-mode fiber ST
ESW205-MC	(4) 10/100 copper, (1) multi-mode fiber SC
ESW205-ST	(4) 10/100 copper, (1) single-mode fiber ST
ESW205-SC	(4) 10/100 copper, (1) single-mode fiber SC
ESW205-T	(5) 10/100 copper, wide temperature, NEMA TS2
ESW205-MT-T	(4) 10/100 copper, (1) multi-mode fiber ST, wide temperature, NEMA TS2
ESW205-MC-T	(4) 10/100 copper, (1) multi-mode fiber SC, wide temperature, NEMA TS2
ESW205-ST-T	(4) 10/100 copper, (1) single-mode fiber ST, wide temperature
ESW205-SC-T	(4) 10/100 copper, (1) single-mode fiber SC, wide temperature, NEMA TS2
ESW208	(8) 10/100 copper
ESW208-2MT	(6) 10/100 copper, (2) multi-mode fiber ST
ESW208-2MC	(6) 10/100 copper, (2) multi-mode fiber SC
ESW208-2ST	(6) 10/100 copper, (2) single-mode fiber ST
ESW208-2SC	(6) 10/100 copper, (2) single-mode fiber SC
ESW208-T	(8) 10/100 copper, wide temperature, NEMA TS2
ESW208-2MT-T	(6) 10/100 copper, (2) multi-mode fiber ST, wide temperature, NEMA TS2
ESW208-2MC-T	(6) 10/100 copper, (2) multi-mode fiber SC, wide temperature
ESW208-2ST-T	(6) 10/100 copper, (2) single-mode fiber ST, wide temperature, NEMA TS2
ESW208-2SC-T	(6) 10/100 copper, (2) single-mode fiber SC, wide temperature, NEMA TS2
ESW208-4MT-T	(4) 10/100 copper, (4) multi-mode fiber ST, wide temperature, NEMA TS2
ESW208-4MC-T	(4) 10/100 copper, (4) multi-mode fiber SC, wide temperature, NEMA TS2
ESW208-4ST-T	(4) 10/100 copper, (4) single-mode fiber ST, wide temperature, NEMA TS2
ESW208-4SC-T	(4) 10/100 copper, (4) single-mode fiber SC wide temperature, NEMA TS2
<b>Gigabit industrial switches</b>	
EIR405-T	(5) 10/100/1000, GB, 12/48VDC, wide temperature, UL, NEMA TS2
EIR405-SFP-T	(4) 10/100/1000, (1) SFP/GB, 12/48VDC, wide temperature, NEMATS2, UL
EIR408-T	(8) 10/100/1000, 12/48VDC, wide temperature, UL, NEMA TS2, C1/D2
EIR410-2SFP-T	(8) 10/100 copper, (2) SFP/GB, 12/48VDC, wide temperature, UL
EIR418-2SFP-T	(16) 10/100 copper, (2) SFP/GB, 12/48VDC, wide temperature, UL
<b>Unmanaged PoE Switches</b>	
<b>Power-over-Ethernet industrial switches</b>	
ESWP205-1SFP-T	(4) 10/100 Copper, (1) 100 SFP, PoE+, wide temperature, 24/52VDC, UL
EIRP305-T	(5) 10/100 copper, (4) PoE, wide temperature, 48/48VDC, UL
EIRP305-24V-T	(5) 10/100 copper, (4) PoE, wide temperature, 24/48VDC, UL, C1/D2
EIRHP305-T	(5) 10/100 copper, (4) PoE, wide temperature, 48 VDC power, UL, C1/D2
<b>Power-over-Ethernet Gigabit industrial switches</b>	
ESWGP206-2SFP-T	(4) 10/100/1000 Copper, (2) SFP, PoE+, wide temperature, 24/52VDC, UL
EIRP410-2SFP-T	(8) 10/100 copper PoE, (2) SFP/GB, wide temperature, UL
<b>PoE Splitter</b>	
<b>Power-over-Ethernet industrial splitter</b>	
EPG202	(2) 10/100/1000 PoE in & data out, PoE/isolation, wide temperature, UL





# ETHERNET MEDIA CONVERTERS

EXTEND YOUR INDUSTRIAL NETWORK TO THE EDGE

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## PRODUCT FAMILY OVERVIEW

# EXTEND YOUR INDUSTRIAL NETWORK TO THE EDGE

Media converters provide an important role in the connectivity of network equipment in local and wide area networks (LAN, WAN). Network devices may have serial, copper or fiber interfaces. Media Converters can provide the necessary connections, and B+B SmartWorx offers an extensive product line. Media Converters support a number of protocols, including Ethernet, RS-232/422/485, Modbus, and Telco.

- ISPs
- Security
- Telcos
- Military Installations
- Traffic Control
- SCADA



## ETHERNET MEDIA CONVERTERS

### Unmanaged Media Converters

- Copper to fiber Ethernet media converters
- Offers diagnostic features such as LFP, Link Loss
- Unmanaged plug-n-play devices
- Supports 10, 100, 10/100, 10/100/1000 and 1000 Mbps
- Small form factor or 1U high standalone design

### Managed Media Converters

- Single or Dual-wide modules
- SNMP manageable
- Copper to fiber converters, including support for SFPs
- Install in single or multiport chassis
- Provides configuration control

### Fiber Mode Converters

- Provides conversion of one fiber type to another
- Modules supporting up to 155Mbps, Gigabit or 10G
- Modular or compact form factor
- No configuration necessary
- SFP support on some models

### Optical Access FTTx (Demarcation)

- SNMP manageable
- SFP option on many models (Fiber, Copper)
- RS-232 CLI Command Line Interface) console
- Allows management traffic segregation from data traffic
- Multiport copper to fiber models

### Telco (TDM)

- Must be installed in pairs
- May support T1 or DS3 Protocols
- Available in single or multi-port modules
- SFP capability on some models

## CHASSIS PRODUCTS

### Managed Chassis

- SNMP manageable
- Power options: AC, DC or ACDC
- Offered in 3, 6, or 20 Slot
- Optional SNMP management module
- Single and Dual power supply modules

### Unmanaged Chassis

- 1 or 2U high standalone chassis
- Standard and wide temperature
- Supports all iMcV-Modules
- Power options: AC or DC

### Small Form Pluggable (SFP) Modules

- MSA-compliant
- Available in SM and MM fiber types
- SSF capability
- ED (Extended Diagnostics) feature

### Ethernet Media Converters - EIS series

- UL/CUL 60950, EN60950, IEC 609050, IEC6100-6-2
- 10/100Base models
- Multi- or single-mode, SC or ST
- Auto negotiation of data rate and duplex modes
- MDI/MDI-X (auto-cross feature)
- Desktop, wall or rack mount options

### Hardened Ethernet Media Converters - EIR series

- Class 1/Division 2 listed
- NEMA TS1/TS2 rated for traffic control equipment
- IEC61000-6-2 EMC, IEC60068 (shock, vibration, free fall)
- Multi- or single-mode, SC or ST
- Wide operating temperature range
- Alarm for power or port link failure - via relay output
- Redundant 10 to 48 VDC inputs - via terminal blocks
- DIN, panel or rack mount

### Gigabit SFP Ethernet Media Converter - Model EIS-G-SFP

- IEEE802.3ab 1000Base-T, 1000Base-SX/LX, 802.3x
- DIP switch setup for link-fault-pass-through, fiber auto/force mode
- 1000 Mbps full-duplex, auto-negotiation, auto-MDI/MDIX
- Full wire-speed forwarding rate
- SFP socket for Gigabit fiber optic expansion

### Hardened Gigabit SFP Ethernet Media Converter - Model EIR-G-SFP-T

- NEMA TS1/TS2 rated for traffic control equipment
- IEC61000-6-2 EMC, IEC 60068 (shock, vibration, free fall)
- DIP switch setup for link-fault-pass-through, fiber auto/force mode
- 1000 Mbps full-duplex, auto-negotiation, auto-MDI/MDIX
- Full wire-speed forwarding rate
- Redundant power inputs
- Wide operating temperature range
- SFP socket for Gigabit fiber optic expansion

## IE = "Industrial Ethernet"

*Industrial Ethernet, IE, has been an identifier for Ethernet equipment that is not necessarily installed in typical LANS, WANs with controlled environments.*

While IE has been a description for anything that may include the words "harsh, rugged and extreme", the reality is that most IE Ethernet products - in particular media converters and low-port switches - meet an extended temperature range.

In addition, one has to count on the DC power source to fully support IE. To be clear, all IE products are designed and built with IE components and tested to the extended temperature range they are marketed as. The value of the IE product is that they are often installed in outdoor enclosures with proper ventilation and moisture resistance to ensure a reliable network extension to applications such as airport towers, street lamps, automation and other environments.

## Class 1/Division 2 Certified For Hazardous Locations

### Ethernet Media Converters

- # IE-MiniMc series
- # EIR-M-ST
- # EIR-M-SC
- # EIR-S-SC



For applications requiring Class 1/Division 2 certification, B+B SmartWorx has a range of connectivity and communication solutions designed to operate in hazardous environments.

- see p60 for a complete listing of C1D2 products.

# PRODUCTS AT-A-GLANCE QUICK SEARCH MATRIX

\* Protocol Independent ranges from 10 Mbps to 1.25 Gbps.  
\*\* Rate conversion option available.  
# Select models

		IE	Protocol						
		Industrial Ethernet	10 Mbps Ethernet	100 Mbps Ethernet	1000 Mbps Ethernet	2.4 Gbps Ethernet	10 Gbps	Protocol Independent *	T1/E1/J1
Unmanaged Media Converter	MiniMc, MiniMc SFP **, MiniMc LFPT <i>New!</i>		•	•					
	Giga-MiniMc series (-SFP, -LFPT), MiniMc-Gigabit series		•	•	•				
	IE-MiniMc, IE-Giga-MiniMc**, IE-Giga-MiniMc LFPT	•	•	•	•				
	IE-MiniMc LFPT, IE-MiniMc/Telco	•	•	•					
	PoE Giga-MiniMc LFPT, PoE+ Giga-MiniMc LFPT		•	•	•				
	Giga-McBasic-II <i>New!</i>		•	•	•				
	PoE McBasic LFPT		•	•					
	PoE & PoE+ Giga-McBasic LFPT		•	•	•				
	McBasic TX/FX, McBasic Gigabit LFPT		•						
	AccessConverter/3**		•	•					
	MediaConverter series: -McPIM, -McLIM, -McGigabit		•	•	•	•			
	<b>McPC- series: -TX/FX, -MediaLinX, -Gigabit -Giga-MediaLinX</b>		•	•	•	•***			
	EIS series, EIR series	•#	•	•					
EIS-G-SFP series, EIR-G-SFP-T series	•#	•	•	•					
Managed Media Converters	IE-iMcV-2xLIM	•		•					
	iMcV-PIM, iMcV-LIM		•	•					
	iMcV-Gigabit, IE-iMcV-Gigabit	•			•				
	iMcV-MediaLinX**, IE-iMcV-MediaLinX, iMcV-Giga-MediaLinX**	•	•	•					
Fiber Mode Converters	iMcV- series: -S2MM, -S2SM, -M2MM							•	
	IE-ModeConverter SFP	•						•	
	IE-iMcV-ModeConverter SFP	•						•	
	iMcV-WDM/2							•	
	IE-iMcV-MuxDemux/4 (WDM)	•						•	
	iMcV-10G Converter XFP						•		
	iMcV-10G Converter SFP+						•		
Optical Access FTTx	<b>IE-MultiWay</b>	•	•	•	•				
	IE-iMcV-MultiWay	•	•	•	•				
	AccessEtherLinX/4**		•	•					
	Giga-AccessEtherLinX-II AC, Giga-AccessEtherLinX-II DC		•	•	•				
	iMcV-FiberLinX-II**		•	•					
	iMcV-Giga-FiberLinX-III		•	•	•				
IE-MiniFiberLinX-II**, IE-MiniFiberLinX-II/Telco, IE-MiniFiberLinX-II/Telco-LastGasp	•		•						
TELCO	<b>IE-iMcV-T1/E1/J1 LineTerm</b>	•							•
	<b>IE-iMcV-E1-Mux/4 + Ethernet</b>	•							•
	IE-iMcV-T1-Mux/4 + Ethernet	•							•
	IE-iMcV-VDSL2 LANextender	•	•	•					
I-McV-DS3/E3/STS LineTerm									
Other	Chassis & Accessories								
	Small Form Pluggable Modules: IE-SFP, SFP+, XFP	•		•	•	•			

		Ports							Form Factor		SNMP		Overview	Models/SKUs
DS3/E3/STS-1	WDM	Fiber	Copper (RJ-45)	PoE/PoE+ (RJ-45)	SFP	SFP+	XFP	Coaxial (BNC)	Standalone	Modular	Managed (any iMcV modules)	Unmanaged (media converter chassis or standalone products)		
		.	.		.				.	.		.	page 20	page 36
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# PRODUCT FAMILY COMPARISON

## UNMANAGED MEDIA CONVERTERS

- Wide Temperature
- 10/100 or Gigabit
- Link Fault Pass Through
- PoE or PoE+



PRODUCT SERIES	MiniMc, MiniMc SFP	MiniMc LFPT <i>New!</i>	Giga-MiniMc, Giga-MiniMc SFP	Giga-MiniMc LFPT	MiniMc-Gigabit
Speed	10/100	10/100	10/100/1000	10/100/1000	1000
Wide Temperature					
Power supply (External or Internal)	External	External	External	External	External
Frame size	1916	1916	10240	10240	10K
PoE / PoE+					
Fiber Type (SFP, 1x9)	1x9, SFP	1x9, SFP	1x9, SFP	1x9, SFP	1x9
Number of Fiber Ports	1	1	1	1	1
Number of Ethernet Ports	1	1	1	1	1
Power: AC and or DC	AC	AC	AC	AC	AC
LFPT	✓ (select models)	✓		✓	
FCC Class B	✓	✓	✓	✓	✓
UL	✓	✓	✓	✓	✓
Mounting Options	DIN, Bracket, Tray	DIN, Bracket, Tray	DIN, Bracket, Tray	DIN, Bracket, Tray	DIN, Bracket, Tray
Media Chassis					
<b>Page (models)</b>	<b>36</b>	<b>36</b>	<b>37</b>	<b>37</b>	<b>38</b>



IE-MiniMc	IE-Giga-MiniMc	IE-Giga-MiniMc LFPT	IE-MiniMc LFPT* IE-MiniMc/TELCO-LastGasp	PoE Giga-MiniMc LFPT, PoE+ Giga-MiniMc LFPT	Giga-McBasic-II <i>New!</i>
10/100	10/100/1000	10/100/1000	10/100	10/100/1000	10/100/1000
✓	✓	✓	✓		✓
External	External	External	External	External	Internal
1916	10240	10240	1916	10240	
				✓	
1x9	1x9	1x9, SFP	1x9	1x9, SFP	1x9, SFP
1	1	1	1	1	1
1	1	1	1	2	2
AC, DC TB	AC, DC TB	AC, DC TB	AC, DC TB	AC, DC TB	AC
		✓	✓		✓
✓	✓	✓	✓	✓	
✓	✓	✓	✓	✓	✓
DIN, Bracket, Tray	DIN, Bracket, Tray	DIN, Bracket, Tray	DIN, Bracket, Tray	DIN, Bracket	DIN, Bracket

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\*LFPT options: DIP switch or permanently enabled.

**IN THE FIELD**  
Long Distance Connections  
in Airport Concourse

Industry: Transaction Management –  
Retail & Banking  
Product: IE-MiniMc Fiber/Copper Media Converter

[www.bb-elec.com/Airport](http://www.bb-elec.com/Airport)



# PRODUCT FAMILY COMPARISON

## UNMANAGED MEDIA CONVERTERS

- Compact or 1U High Form Factor
- 10 Mbps to Gigabit models
- Link Fault Pass Through
- PoE or PoE+



PRODUCT SERIES	PoE-McBasic LFPT	PoE Giga-McBasic LFPT PoE+ Giga-McBasic LFPT	McBasic TX/FX	McBasic Gigabit LFPT
Speed	10/100	10/100/1000	100	1000
Wide Temperature				
Power supply (External or Internal)	Internal	Internal	Internal	Internal
Frame size	10240	10240	10K	10K
PoE / PoE+	✓	✓		
Fiber Type (SFP, 1x9)	1x9	1x9, SFP	1x9	1x9
Number of Fiber Ports	1	1	1	1
Number of Ethernet Ports	2	2	1	1
Power: AC and or DC	AC	AC	AC	AC
LFPT		✓		✓
FCC Class B	✓	✓	Class A	Class A
UL	✓	✓	✓	✓
Mounting Options	Standalone, Shelf	Standalone, Shelf	Standalone, Shelf	Standalone, Shelf
Media Chassis				
<b>Page (models)</b>	<b>43</b>	<b>43</b>	<b>43</b>	<b>44</b>



AccessConverter/3	McPIM TP/FO	McLIM TX/FX	McLIM TP/TX/FX	McGigabit
10/100	10	100	10/100	1000
External	Chassis-Based	Chassis-Based	Chassis-Based	Chassis-Based
1916	10K	10K	1916	10K
1x9	1x9	1x9	1x9	1x9
1	1	1	1	1
3	1	1	1	1
AC, DC TB	Chassis-Based	Chassis-Based	Chassis-Based	Chassis-Based
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
DIN, Bracket	N/A	N/A	N/A	N/A

MediaConverter Chassis series      MediaConverter Chassis series      MediaConverter Chassis series      MediaConverter Chassis series

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## “MC” Modules

*Small and compact, the Mc Modules are designed to be installed into the popular unmanaged Media Converter Chassis.*

The Modules are available in 10Mbps, 10/100Mbps and Gigabit. Providing copper to fiber conversion in a variety of fiber types, all offer diagnostic features to enable the end user to quickly resolve network connectivity. LED indicators display link conditions for the copper and fiber ports. These highly reliable media converters offer the flexibility of upgrading a network from one speed to another as technology demands change.

# PRODUCT FAMILY COMPARISON

## UNMANAGED MEDIA CONVERTERS

- Diagnostic LEDs
- 10/100 Mbps to Gigabit
- Standard Temperature (0 to 50° C)
- Wide Temperature Options
- Variable Fiber Types



PRODUCT SERIES	McPC TX/FX PC Installed	McPC Gigabit PC Installed	McPC MediaLinX PC Installed	McPC Giga-MediaLinX PC Installed
Speed	100	1000	10/100	10/100/1000
Wide Temperature				
Power supply (external or internal)	N/A	N/A	N/A	N/A
Frame size	10K	10K	1916	
SFP or 1X9	1x9	1x9	1x9	1x9
Number of Fiber Ports	1	1	1	1
Number of Ethernet Ports	1	1	1	1
Power: AC and or DC	SATA Cable	SATA Cable	SATA Cable	SATA Cable
LFPT				
FCC Class B	✓	✓	✓	✓
UL	✓	✓	✓	✓
PCI / Low-profile PCI	✓✓	✓✓	✓✓	✓✓
Mounting Options				
Media Chassis				
<b>Page (models)</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>



### IN THE FIELD

#### High Bandwidth for National Archives

Industry: Enterprise IT  
 Product: McPC Multi-mode Fiber Media Converters

[www.bb-elec.com/Archives](http://www.bb-elec.com/Archives)



EIS series	EIR series	Model EIS-G-SFP	Model EIR-G-SFP-T
10/100	10/100	10/100/1000	10/100/1000
	✓		✓
External (rack/chassis, redundant PS option)	External	External (rack/chassis, redundant PS option)	External
1x9	1x9	SFP	SFP
1	1	1	1
1	1	1	1
DC TB (rack/chassis option)	DC TB)	DC TB (rack/chassis option)	DC TB
	✓		✓
Class A	Class A	Class A	Class A
✓	C1/D2, NEMA TS1 & TS2		NEMA TS1 & TS2
Desk, Wall, Rack/chassis	DIN, Panel	Desk, Wall, Rack/chassis	DIN, Panel
19" Rack System (#EIS-RACK-16)		19" Rack System (#EIS-RACK-16)	
<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>

## Model EIS-G-SFP & EIS series

- with rack chassis installation option

*Unmanaged copper to fiber compact media converters increase Ethernet distance and protect against electrical interference.*

Desk or wall mount as stand-alone products or install into available 19-inch rack chassis system. The chassis system supports hot-swap installation of media converters, Ethernet extenders, and redundant power supplies to power up to 16 media converters and extenders.



Media Converter 19" 2U Rack Chassis, 6 Slots  
Model# EIS-RACK-16

# PRODUCT FAMILY COMPARISON MANAGED MEDIA CONVERTERS

- Wide Temperature
- 10 Mbps up to Gigabit
- Link Fault Pass Through
- SNMP Manageable



PRODUCT SERIES	IE-iMcV-2xLIM	iMcV-PIM	iMcV-LIM	iMcV-Gigabit, IE-iMcV-Gigabit
Speed	100	10	100	1000
Wide Temperature	✓			✓
Modular	✓	✓	✓	✓
Frame size	10K	10K	10K	10K
SNMP Manageable	✓	✓	✓	✓
Configuration Control	✓		✓	✓
SFP or 1X9	SFP	1x9	1x9	1x9, SFP
Number of Fiber Ports	2	1	1	1
Number of Ethernet Ports	2	1	1	1
Power: AC and or DC	Chassis Based	Chassis Based	Chassis Based	Chassis Based
LFPT	✓		✓	✓
FCC Class B	✓	✓	✓	✓
UL	✓	✓	✓	✓
Media Chassis	MediaChassis series, iMediaChassis series	MediaChassis series, iMediaChassis series	MediaChassis series, iMediaChassis series	MediaChassis series, iMediaChassis series
<b>Page (models)</b>	<b>46</b>	<b>46</b>	<b>46</b>	<b>46</b>



## FREE SNMP Management Software

- webserver and desktop versions available
- download via the website
- supports MIBs II
- CLI, Telnet and other features



**NEW!**  
**SFP version**

iMcV-MediaLinX	IE-iMcV-MediaLinX	iMcV-Giga-MediaLinX <i>NEW!</i>
10/100	10/100	10/100/1000
✓	✓	
✓	✓	✓
1532	1532	1632
✓	✓	✓
✓	✓	✓
1x9, SFP	1x9, SFP	1x9, SFP
1	1	1
1	1	1
Chassis Based	Chassis Based	Chassis Based
	✓	✓
✓	✓	✓
✓	✓	✓
MediaChassis series, iMediaChassis series	MediaChassis series, iMediaChassis series	MediaChassis series, iMediaChassis series
<b>47</b>	<b>46</b>	<b>47</b>

## MediaChassis series - "iMcV-" Modules

*MediaChassis series form factor options:*

- Managed (iMediaChassis)
- Unmanaged (MediaChassis/1,-2)
- Unmanaged, extended temperature (IE), IE-MediaChassis/1-/2

Any of the iMcV Modules can be installed into these chassis - depending on the port count for a given installation.

iMediaChassis is available in dual AC, dual DC version in 3, 6 and 20 slots. An optional SNMP Management Module is required for management.

MediaChassis/1 and Media Chassis/2 are great solutions for installation at the CPE reducing the cost of installation. (AC, DC)

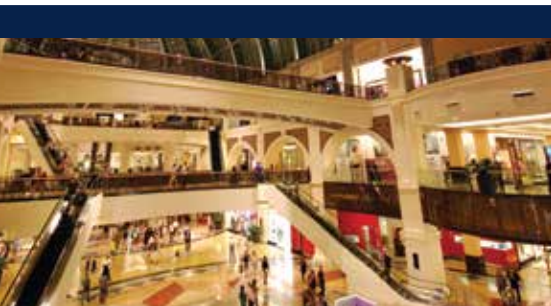
IE-MediaChassis accepts any IE iMcV Module and fulfills extended temperature requirements for outside enclosure applications. (AC, DC)

# PRODUCT FAMILY COMPARISON FIBER MODE CONVERTERS

- Mode Conversion
- 155 Mbps, Gigabit, 10G
- SNMP Manageable
- Wide Temperature



PRODUCT SERIES	iMcV-S2MM	iMcV-S2SM	iMcV-M2MM	IE-ModeConverter SFP
Speed	155 Mbps, 1.25 Mbps	155 Mbps, 1.25 Mbps	155 Mbps, 1.25 Mbps	155 Mbps, 1.25 Mbps, 2.4 Gbps
Wide Temperature				✓
Power supply (external or internal)				External
Frame size	10K	10K	10K	10K
SNMP Manageable (yes or no)	✓	✓	✓	
SFP or 1X9	1x9	1x9	1x9	SFP
Number of Fiber Ports	2	2	2	2
Number of Ethernet Ports	0	0	0	0
Power: AC and or DC	Chassis-Based	Chassis-Based	Chassis-Based	AC, DC TB
FCC Class B	✓	✓	✓	✓
UL	✓	✓	✓	✓
Media Chassis	MediaChassis series, iMediaChassis series	MediaChassis series, iMediaChassis series	MediaChassis series, iMediaChassis series	
<b>Page (models)</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>49</b>



## IN THE FIELD High Bandwidth for Dubai Mall

Industry: Enterprise IT  
Product: IE-Mode Converters w/ SFP modules;  
IE-PowerTray/18 High-density Chassis

[www.bb-elec.com/DubaiMall](http://www.bb-elec.com/DubaiMall)



IE-iMcV-ModeConverter SFP	iMcV-WDM/2	IE-iMcV-MuxDemux/4 (WDM) (two models)	iMcV-10G Converter XFP	iMcV-10G Converter SFP+
155 Mbps, 1.25 Mbps, 2.4 Gbps	Unlimited, up to 10G	Unlimited, up to 10G	10G	10G
✓		✓		
10K	10K	10K	✓	✓
✓	✓	✓	✓	✓
SFP	1x9	1x9	✓	✓
2	2	6	XFP	SFP+
0	0	0	2	2
Chassis-Based	NA	NA	Chassis Based	Chassis Based
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
MediaChassis series, iMediaChassis series	MediaChassis series, iMediaChassis series	MediaChassis series, iMediaChassis series	MediaChassis series, iMediaChassis series	MediaChassis series, iMediaChassis series
<b>49</b>	<b>49</b>	<b>49</b>	<b>49</b>	<b>49</b>

## MediaChassis series - "iMcV-" Modules

### MediaChassis series form factor options:

- Managed (iMediaChassis)
- Unmanaged (MediaChassis/1, -2)
- Unmanaged, extended temperature (IE), IE-MediaChassis/1-2

Any of the iMcV Modules can be installed into these chassis - depending on the port count for a given installation.

iMediaChassis is available in dual AC, dual DC version in 3, 6 and 20 slots. An optional SNMP Management Module is required for management.

MediaChassis/1 and Media Chassis/2 are great solutions for installation at the CPE reducing the costs of installation. (AC, DC)

IE-MediaChassis accepts any IE iMcV Module and fulfills extended temperature requirements for outside enclosure applications. (AC, DC)

# PRODUCT FAMILY COMPARISON

## OPTICAL ACCESS FTTx

- SNMP Management
- 10/100 or Gigabit
- Link Fault Pass Through
- Last Gasp
- Telco Power (-48 VDC)



PRODUCT SERIES	IE-MultiWay	IE-iMcV-MultiWay	AccessEtherLinX/4	Giga-Access EtherLinX-II AC	Giga-Access EtherLinX-II DC
Speed	10/100/1000	10/100/1000	10/100	10/100/1000	10/100/1000
Wide Temperature	✓	✓			
Power supply (external or internal)	External	✓	Internal	Internal	Internal
Frame size	10240	10204	1916	9600	9600
SNMP Managable Directly	✓	✓	✓	✓	✓
Host/Remote / Standalone	Standalone		Standalone, Remote	Standalone, Remote	Standalone, Remote
Fiber Type (SFP, 1x9)	SFP	SFP	1x9, SFP	1x9, SFP	1x9, SFP
Number of Fiber Ports	2	2	1	1	1
Number of Ethernet Ports	2	2	4	4	4
Power: AC and or DC	AC, DC TB	Chassis Based	AC	AC	DC
LFPT	✓	✓	✓	✓	✓
OAM	✓	✓			
Bandwidth Scalability	✓	✓	✓	✓	✓
FCC Class B	✓	✓	✓	✓	✓
UL	✓		✓	✓	✓
Mounting Options	DIN, Bracket	Chassis	Rackmount Bracket	Rackmount Bracket	Rackmount Bracket
Media Chassis		MediaChassis series, iMediaChassis series			
<b>Page (models)</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>51</b>	<b>51</b>



### IN THE FIELD

#### Intelligent Facilities: Controlling Access & Security

Industry: Security  
 Product: IE-MultiWay Ethernet Media Converter

[www.bb-elec.com/Access](http://www.bb-elec.com/Access)



iMcV-FiberLinX-II	iMcV-Giga-FiberLinX-III	IE-MiniFiberLinX-II	IE-MiniFiberLinX-II Telco	IE-MiniFiberLinX-II Telco-LastGasp
10/100	10/100/1000	10/100	10/100	10/100
		✓	✓	✓
Internal (Chassis)	Internal (Chassis)	External	External	External
1916	10240	1916	1916	1916
✓	✓	✓	✓	✓
Host/Remote, Standalone	Host/Remote, Standalone	Remote, Standalone	Remote, Standalone	Remote, Standalone
1x9, SFP	1x9, SFP	1x9	1x9	1x9
1	1	1	1	1
2	2	1	1	1
AC, DC(Chassis based)	AC, DC(Chassis based)	AC, DC TB	AC, DC TB	AC, DC TB
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
✓	✓	Class A	Class A	Class A
✓	✓	✓	✓	✓
Chassis	Chassis	DIN, Bracket	DIN, Bracket	DIN, Bracket
MediaChassis series, iMediaChassis series	MediaChassis series, iMediaChassis series			
<b>52</b>	<b>52</b>	<b>53</b>	<b>53</b>	<b>54</b>

## MediaChassis series - "iMcV-" Modules

*MediaChassis series form factor options:*

- Managed (iMediaChassis)
- Unmanaged (MediaChassis/1,-2)
- Unmanaged, extended temperature (IE), IE-MediaChassis/1-/2

Any of the iMcV Modules can be installed into these chassis - depending on the port count for a given installation.

iMediaChassis is available in dual AC, dual DC version in 3, 6 and 20 slots. An optional SNMP Management Module is required for management.

MediaChassis/1 and Media Chassis/2 are great solutions for installation at the CPE reducing the costs of installation. (AC, DC)

IE-MediaChassis accepts any IE iMcV Module and fulfills extended temperature requirements for outside enclosure applications. (AC, DC)

# PRODUCT FAMILY COMPARISON

## TDM/TELCO

- Wide Temperature
- Deploy in Pairs
- Diagnostic Alarms (RAI, LOS)
- SNMP Manageable



PRODUCT SERIES	iE-McV-T1/E1/J1 LineTerm	IE-iMcV-E1-Mux/4 + Ethernet	IE-iMcV-T1-Mux/4 + Ethernet
Speed	1.54/2.048 Mbps	2.048 to 10/100 Mbps	1.54 to 10/100 Mbps
Wide Temperature		✓	✓
Modular	✓	✓	✓
Frame size	N/A	10K	10K
SNMP Manageable (yes or no)	✓	✓	✓
Configuration Control	✓		
SFP or 1X9	1x9	SFP	SFP
Number of Fiber Ports	1	2	2
Number of Ethernet Ports	1	1 (+ 4 E1)	1 (+ 4 T1)
Power: AC and or DC	Chassis Based	Chassis Based	Chassis Based
LFPT		✓	✓
FCC Class B	✓	✓	✓
UL	✓	✓	✓
Media Chassis	MediaChassis series, iMediaChassis series	MediaChassis series, iMediaChassis series	MediaChassis series, iMediaChassis series
<b>Page (models)</b>	<b>54</b>	<b>55</b>	<b>55</b>



IE-iMcV-VDSL2 LANextender	iMcV-DS3/E3/STS LineTerm
Asynchronous Speed to 10/100 Mbps	34/45/52 Mbps
✓	
✓	✓
1536	N/A
✓	✓
	✓
	1x9
	1
1	1 BNC Pair
Chassis Based	Chassis Based
✓	
✓	✓
✓	✓
MediaChassis series, iMediaChassis series	MediaChassis series, iMediaChassis series
<b>55</b>	<b>55</b>

## TDM (“TELCO”)

T1 and DS3 protocol-based equipment often need extension over longer distances than they did 20 years ago. This is where TDM Modules can provide the solution, as they provide a fiber interface to support distances of up to 70km or more.

TDM modules must be deployed in pairs, but are well-designed to support a plug and play configuration. Diagnostic features such as loopback and other alarms such as RAI and LOS allow the installer to quickly identify and resolve any installation issues. These versatile modules can be installed in a variety of managed and unmanaged chassis.

## MediaChassis series - “iMcV-” Modules

*MediaChassis series form factor options:*

- Managed (iMediaChassis)
- Unmanaged (MediaChassis/1,-2)
- Unmanaged, extended temperature (IE), IE-MediaChassis/1-/2

Any of the iMcV Modules can be installed into these chassis - depending on the port count for a given installation.

iMediaChassis is available in dual AC, dual DC version in 3, 6 and 20 slots. An optional SNMP Management Module is required for management.

MediaChassis/1 and Media Chassis/2 are great solutions for installation at the CPE reducing the costs of installation. (AC, DC)

IE-MediaChassis accepts any IE iMcV Module and fulfills extended temperature requirements for outside enclosure applications. (AC, DC)

# PRODUCT FAMILY COMPARISON MEDIA CHASSIS PRODUCTS

- 3, 6, 20 Slot Chassis
- Rack Mount Options
- SNMP Management Card, Optional
- Any Mc-Module installs in a 1,4,8 or 12 slot MediaConverter Chassis
- Any iMcV-Module installs in all iMediaChassis or MediaChassis series



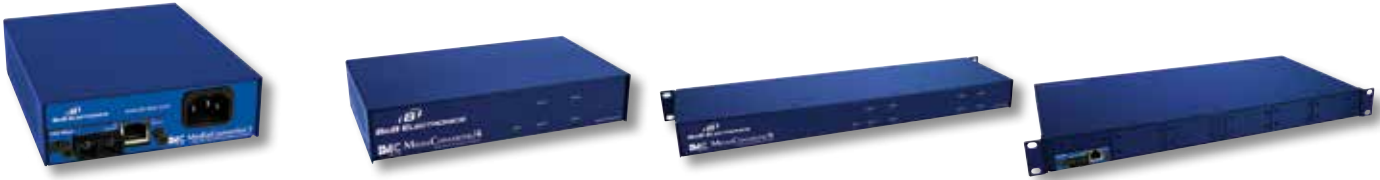
## MANAGED CHASSIS

PRODUCT SERIES	iMediaChassis/20	iMediaChassis/6	iMediaChassis/3
Wide Temperature			
Power supply (Dual or Single)	Dual	Dual, Single	Dual, Single
SNMP Manageable (yes or no)	✓	✓	✓
Number of Slots	20 + 1 SNMP	6 + 1 SNMP	3 + 1 SNMP
Power: AC and/or DC	AC, DC	AC, DC	AC, DC
FCC Class B	✓	✓	✓
UL	✓	✓	✓
Mounting Options	Rack Ears	Rack Ears	Shelf
<b>Page (models)</b>	<b>56</b>	<b>56</b>	<b>56</b>



## UNMANAGED CHASSIS

PRODUCT SERIES	IE-MediaChassis/1-AC	MediaChassis/1 AC IE-MediaChassis/1 DC	MediaChassis/2 AC IE-MediaChassis/2 AC IE-MediaChassis/2 DC
Wide Temperature	✓	✓ (IE-MediaChassis/1 DC)	✓ (IE-MediaChassis/2 AC and DC)
Power supply (Dual or Single)	AC external , DC TB	Single	Single
SNMP Manageable (yes or no)			
Number of Slots	1	1	2
Power: AC and/or DC	AC, DC TB	AC, DC	AC, DC
FCC Class B	✓	✓	✓
UL	✓	✓	✓
Mounting Options	DIN, Wallmount Bracket, Shelf	Rack Ears, Shelf	Rack Ears, Shelf
<b>Page (models)</b>	<b>56</b>	<b>56</b>	<b>56</b>



**UNMANAGED CHASSIS**

MediaConverter/1	MediaConverter/4	MediaConverter/8	MediaConverter/12
Single	Single	Single	Dual, Single
1	4	8	12
AC	AC	AC	AC
✓	✓	✓	✓
✓	✓	✓	✓
Shelf		Rack Ears	Rack Ears
<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>

**Model IE-PowerTray/18-AC**  
- ideal for extreme environments



18-slot chassis, -20°C to +70°C, AC power  
Model# IE-POWERTRAY/18-AC

*The IE-PowerTray/18-AC can be rack-mounted into standard 19" equipment racks and features extended temperature operation and an internal AC power supply (included)*

This high-density mounting and powering chassis supports MiniMc, MiniMc SFP, MiniMc-Gigabit, Giga-MiniMc, IE-MiniMc, IE-Giga-MiniMc and IE-ModeConverter SFP/SFP Media and Mode Converters.

**MediaConverter Chassis Series**

*The MediaConverter chassis series is a 1U high system, available in 1,4,8 and 12 slot systems.*

As an unmanaged chassis, it offers internal AC power; the 12 slot chassis is capable of redundant power. Small, horizontal media converter modules can be installed into the chassis in any combination. Highly reliable, the MediaConverter Series Chassis is a great choice for provisioning multiple connections in an Ethernet network.

# UNMANAGED MEDIA CONVERTERS

## MiniMc

### MiniMc miniature media converter

- includes AC power adapter

10/100 Mbps Switching Copper (TP-TX),  
100 Mbps Fiber (FX) Ethernet

MODEL #	DESCRIPTION	DISTANCE - dB
<b>MiniMc, TP-TX/FX</b>		
855-10619	MiniMc, TP-TX/SFP (requires one IE-SFP/155 module)	SFP Variable
855-10620	MiniMc, TP-TX/FX-MM850-ST	2km - 14dB
855-10621	MiniMc, TP-TX/FX-MM850-SC	2km - 14dB
855-10622	MiniMc, TP-TX/FX-MM1300-ST	5km - 11dB
855-10623	MiniMc, TP-TX/FX-MM1300-SC	5km - 11dB
855-10623-RX	MiniMc, TP-TX/FX-MM1300-SC (RX only)	5km - 11dB
852-10623-TX	MiniMc, TP-TX/FX-MM1300-SC (TX only)	5km - 11dB
855-10624	MiniMc, TP-TX/FX-SM1310/PLUS-ST	40km - 19dB
855-10625	MiniMc, TP-TX/FX-SM1310/PLUS-SC	40km - 19dB
855-10626	MiniMc, TP-TX/FX-SM1310/LONG-ST	80km - 31dB
855-10627	MiniMc, TP-TX/FX-SM1310/LONG-SC	80km - 31dB
855-10641	MiniMc, TP-TX/FX-SM1550/LONG-SC	80km - 31dB

### MiniMc, Single-strand Fiber

855-10650	MiniMc, TP-TX/SSFX-MM1310-SC (1310xmt/1550rcv)	2km - 20dB
855-10651	MiniMc, TP-TX/SSFX-MM1550-SC (1550xmt/1310rcv)	2km - 20dB
855-10652	MiniMc, TP-TX/SSFX-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
855-10653	MiniMc, TP-TX/SSFX-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
855-10654	MiniMc, TP-TX/SSFX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
855-10655	MiniMc, TP-TX/SSFX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
855-10656	MiniMc, TP-TX/SSFX-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
855-10657	MiniMc, TP-TX/SSFX-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

MiniMc, CWDM fiber also available. Call for details.

### MiniMc miniature media converter

- no AC power adapter included

10/100 Mbps Switching Copper (TP-TX),  
100 Mbps Fiber (FX) Ethernet

MODEL #	DESCRIPTION	DISTANCE - dB
<b>MiniMc, TP-TX/FX</b>		
854-10619	MiniMc, TP-TX/SFP (requires one IE-SFP/155 module)	SFP Variable
854-10620	MiniMc Module, TP-TX/FX-MM850-ST	2km - 14dB
854-10621	MiniMc, TP-TX/FX-MM850-SC	2km - 14dB
854-10622	MiniMc, TP-TX/FX-MM1300-ST	5km - 11dB
854-10623	MiniMc, TP-TX/FX-MM1300-SC	5km - 11dB
854-10624	MiniMc, TP-TX/FX-SM1310/PLUS-ST	40km - 19dB
854-10625	MiniMc, TP-TX/FX-SM1310/PLUS-SC	40km - 19dB
854-10626	MiniMc, TP-TX/FX-SM1310/LONG-ST	80km - 31dB
854-10627	MiniMc, TP-TX/FX-SM1310/LONG-SC	80km - 31dB
854-10641	MiniMc, TP-TX/FX-SM1550/LONG-SC	80km - 31dB

### MiniMc, Single-strand Fiber

854-10650	MiniMc, TP-TX/SSFX-MM1310-SC (1310xmt/1550rcv)	2km - 20dB
854-10651	MiniMc, TP-TX/SSFX-MM1550-SC (1550xmt/1310rcv)	2km - 20dB
854-10652	MiniMc, TP-TX/SSFX-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
854-10653	MiniMc, TP-TX/SSFX-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
854-10654	MiniMc, TP-TX/SSFX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
854-10655	MiniMc, TP-TX/SSFX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
854-10656	MiniMc, TP-TX/SSFX-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
854-10657	MiniMc, TP-TX/SSFX-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

MiniMc, CWDM fiber also available. Call for details.

### MiniMc miniature media converter

- with LFPT DSW

Link Fault Pass Through (LFPT) 10/100 Base-TX,  
100 Mbps Fiber (FDX) Ethernet

MODEL #	DESCRIPTION	DISTANCE - dB
<b>MiniMc with LFPT</b>		
855-11619	MiniMc with LFPT, TP-TX/FX-SFP (requires one SFP)	SFP Variable
855-11620	MiniMc with LFPT, TP-TX/FX-MM850-ST	2km - 14dB
855-11621	MiniMc with LFPT, TP-TX/FX-MM850-SC	2km - 14dB
855-11622	MiniMc with LFPT, TP-TX/FX-MM1300-ST	5km - 11dB
855-11623	MiniMc with LFPT, TP-TX/FX-MM1300-SC	5km - 11dB
855-11624	MiniMc with LFPT, TP-TX/FX-SM1310/PLUS-ST	40km - 19dB
855-11625	MiniMc with LFPT, TP-TX/FX-SM1310/PLUS-SC	40km - 19dB
855-11626	MiniMc with LFPT, TP-TX/FX-SM1310/LONG-SC	80km - 31dB
855-11627	MiniMc with LFPT, TP-TX/FX-SM1310/LONG-ST	80km - 31dB
855-11641	MiniMc with LFPT, TP-TX/FX-SM1550/LONG-SC	80km - 31dB
855-11650	MiniMc with LFPT, TP-TX/SSFX-MM1550-SC	2km - 20dB
855-11651	MiniMc with LFPT, TP-TX/SSFX-MM1310-SC	2km - 20dB
855-11652	MiniMc with LFPT, TP-TX/SSFX-SM1310-SC (1310/1550)	20km - 17dB
855-11653	MiniMc with LFPT, TP-TX/SSFX-SM1550-SC (1550/1310)	20km - 17dB
855-11654	MiniMc with LFPT, TP-TX/SSFX-SM1310/PLUS-SC (1310/1550)	40km - 26dB
855-11655	MiniMc with LFPT, TP-TX/SSFX-SM1550/PLUS-SC (1550/1310)	40km - 26dB
855-11656	MiniMc with LFPT, TP-TX/SSFX-SM1310/LONG-SC (1310/1550)	60km - 31dB
855-11657	MiniMc with LFPT, TP-TX/SSFX-SM1550/LONG-SC (1550/1310)	60km - 31dB

## Giga-MiniMc

### Giga-MiniMc miniature media converter - includes AC power adapter

1.25 Gbps - 10/100/1000 Mbps Switching Copper (TX),  
1000 Mbps Fiber (SX or LX)

MODEL #	DESCRIPTION	DISTANCE - dB
<b>Giga-MiniMc TX/LX</b>		
856-10747	Giga-MiniMc, TX/SFP (requires one IE-SFP/1250 module)	SFP Variable
856-10730	Giga-MiniMc, TX/SX-MM850-SC	220/550m-7.5dB
856-10730-RX	Giga-MiniMc, TX/SX-MM850-SC (RX only)	220/550m-7.5dB
856-10730-TX	Giga-MiniMc, TX/SX-MM850-SC (TX only)	220/550m-7.5dB
856-10728	Giga-MiniMc, TX/LX-MM1300-SC	2km - 12.5dB
856-10731	Giga-MiniMc, TX/LX-SM1310-SC	10km - 10.5dB
856-10732	Giga-MiniMc, TX/LX-SM1310/PLUS-SC	40km - 21dB
856-10733	Giga-MiniMc, TX/LX-SM1550/LONG-SC	80km - 24dB
856-10729	Giga-MiniMc, TX/LX-SM1550/XLONG-SC	100km - 32dB
<b>Giga-MiniMc TX/LX, Single-strand Fiber</b>		
856-10734	Giga-MiniMc, TX/SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12dB
856-10735	Giga-MiniMc, TX/SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12dB
856-10742	Giga-MiniMc, TX/SSBX-SM1310-SC (1310xmt/1490rcv)	10km - 12dB
856-10743	Giga-MiniMc, TX/SSBX-SM1490-SC (1490xmt/1310rcv)	10km - 12dB
856-10736	Giga-MiniMc, TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
856-10737	Giga-MiniMc, TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
856-10744	Giga-MiniMc, TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20dB
856-10745	Giga-MiniMc, TX/SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	30km - 20dB
856-10738	Giga-MiniMc, TX/SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	70km - 19dB
856-10739	Giga-MiniMc, TX/SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	70km - 19dB

### Giga-MiniMc miniature media converter - no AC power adapter included

1.25 Gbps - 10/100/1000 Mbps Switching Copper (TX),  
1000 Mbps Fiber (SX or LX)

MODEL #	DESCRIPTION	DISTANCE - dB
<b>Giga-MiniMc TX/LX</b>		
854-10747	Giga-MiniMc, TX/SFP (requires one IE-SFP/1250 module)	SFP Variable
854-10730	Giga-MiniMc, TX/SX-MM850-SC	220/550m-7.5dB
854-10728	Giga-MiniMc, TX/LX-MM1300-SC	2km - 12.5dB
854-10731	Giga-MiniMc, TX/LX-SM1310-SC	10km - 10.5dB
854-10732	Giga-MiniMc, TX/LX-SM1310/PLUS-SC	40km - 21dB
854-10733	Giga-MiniMc, TX/LX-SM1550/LONG-SC	80km - 24dB
854-10729	Giga-MiniMc, TX/LX-SM1550/XLONG-SC	100km - 32dB
<b>Giga-MiniMc, Single-strand Fiber</b>		
854-10734	Giga-MiniMc, TX/SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12dB
854-10735	Giga-MiniMc, TX/SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12dB
854-10742	Giga-MiniMc, TX/SSBX-SM1310-SC (1310xmt/1490rcv)	15km - 12dB
854-10743	Giga-MiniMc, TX/SSBX-SM1490-SC (1490xmt/1310rcv)	15km - 12dB
854-10736	Giga-MiniMc, TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
854-10737	Giga-MiniMc, TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
854-10744	Giga-MiniMc, TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20dB
854-10745	Giga-MiniMc, TX/SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	30km - 20dB
854-10738	Giga-MiniMc, TX/SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	70km - 19dB
854-10739	Giga-MiniMc, TX/SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	70km - 19dB

### Giga-MiniMc/LFPT miniature media converter - includes AC power adapter

1.25 Gbps - 10/100/1000 Mbps Switching Copper (TX),  
1000 Mbps Fiber (SX or LX)

MODEL #	DESCRIPTION	DISTANCE - dB
<b>Giga-MiniMc/LFPT TX/LX</b>		
856-11700	Giga-MiniMc/LFPT, TX/SFP (requires one IE-SFP/1250 module)	SFP Variable
856-11701	Giga-MiniMc/LFPT, TX/SX-MM850-SC	220/550m-7.5dB
856-11702	Giga-MiniMc/LFPT, TX/LX-MM1300-SC	5km - 12.5dB
856-11703	Giga-MiniMc/LFPT, TX/LX-SM1310-SC	10km - 10.5dB
856-11704	Giga-MiniMc/LFPT, TX/LX-SM1310/PLUS-SC	40km - 21dB
856-11705	Giga-MiniMc/LFPT, TX/LX-SM1550/LONG-SC	80km - 24dB
856-11706	Giga-MiniMc/LFPT, TX/LX-SM1550/XLONG-SC	100km - 32dB
<b>Giga-MiniMc/LFPT, Single-strand Fiber</b>		
856-11710	Giga-MiniMc/LFPT, TX/SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12dB
856-11711	Giga-MiniMc/LFPT, TX/SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12dB
856-11712	Giga-MiniMc/LFPT, TX/SSBX-SM1310-SC (1310xmt/1490rcv)	10km - 12dB
856-11713	Giga-MiniMc/LFPT, TX/SSBX-SM1490-SC (1490xmt/1310rcv)	10km - 12dB
856-11714	Giga-MiniMc/LFPT, TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
856-11715	Giga-MiniMc/LFPT, TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
856-11742	Giga-MiniMc/LFPT, TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20dB
856-11743	Giga-MiniMc/LFPT, TX/SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	30km - 20dB
856-11744	Giga-MiniMc/LFPT, TX/SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	60km - 19dB
856-11745	Giga-MiniMc/LFPT, TX/SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	60km - 19dB

### Giga-MiniMc/LFPT module, miniature media converter - no AC power adapter included

1.25 Gbps - 10/100/1000 Mbps Switching Copper (TX),  
1000 Mbps Fiber (SX or LX)

MODEL #	DESCRIPTION	DISTANCE - dB
<b>Giga-MiniMc/LFPT Module TX/LX</b>		
854-11700	Giga-MiniMc/LFPT Module, TX/SFP (requires one IE-SFP/1250 module)	SFP Variable
854-11701	Giga-MiniMc/LFPT Module, TX/SX-MM850-SC	220/550m-7.5dB
854-11702	Giga-MiniMc/LFPT Module, TX/LX-MM1300-SC	2km - 12.5dB
854-11703	Giga-MiniMc/LFPT Module, TX/LX-SM1310-SC	10km - 10.5dB
854-11704	Giga-MiniMc/LFPT Module, TX/LX-SM1310/PLUS-SC	40km - 21dB
854-11705	Giga-MiniMc/LFPT Module, TX/LX-SM1550/LONG-SC	80km - 24dB
854-11706	Giga-MiniMc/LFPT Module, TX/LX-SM1550/XLONG-SC	100km - 32dB
<b>Giga-MiniMc/LFPT Module, Single-strand Fiber</b>		
854-11710	Giga-MiniMc/LFPT Module, TX/SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12dB
854-11711	Giga-MiniMc/LFPT Module, TX/SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12dB
854-11712	Giga-MiniMc/LFPT Module, TX/SSBX-SM1310-SC (1310xmt/1490rcv)	15km - 12dB
854-11713	Giga-MiniMc/LFPT Module, TX/SSBX-SM1490-SC (1490xmt/1310rcv)	15km - 12dB
854-11714	Giga-MiniMc/LFPT Module, TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
854-11715	Giga-MiniMc/LFPT Module, TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
854-11742	Giga-MiniMc/LFPT Module, TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20dB
854-11743	Giga-MiniMc/LFPT Module, TX/SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	30km - 20dB
854-11744	Giga-MiniMc/LFPT Module, TX/SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	70km - 19dB
854-11745	Giga-MiniMc/LFPT Module, TX/SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	70km - 19dB

# UNMANAGED MEDIA CONVERTERS - continued

## MiniMc-Gigabit

### MiniMc-Gigabit - Miniature Media Converters

- includes AC power adapter

1.25 Gbps - 1000 Mbps Copper (TX),  
1000 Mbps Fiber (SX or LX)

MODEL #	DESCRIPTION	DISTANCE - dB
<b>MiniMc-Gigabit TX/LX</b>		
855-10730	MiniMc-Gigabit, TX/SX-MM850-SC	220/550m-7.5dB
855-10731	MiniMc-Gigabit, TX/LX-SM1310-SC	10km - 10.5dB
855-10732	MiniMc-Gigabit, TX/LX-SM1310/PLUS-SC	40km - 21dB
855-10733	MiniMc-Gigabit, TX/LX-SM1550/LONG-SC	80km - 24dB
<b>MiniMc-Gigabit, Single-strand Fiber</b>		
855-10734	MiniMc-Gigabit, TX/SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12dB
855-10735	MiniMc-Gigabit, TX/SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12dB
855-10742	MiniMc-Gigabit, TX/SSBX-SM1310-SC (1310xmt/1490rcv)	10km - 12dB
855-10743	MiniMc-Gigabit, TX/SSBX-SM1490-SC (1490xmt/1310rcv)	10km - 12dB
855-10736	MiniMc-Gigabit, TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
855-10737	MiniMc-Gigabit, TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
855-10744	MiniMc-Gigabit, TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20dB
855-10745	MiniMc-Gigabit, TX/SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	30km - 20dB
855-10738	MiniMc-Gigabit, TX/SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	70km - 19dB
855-10739	MiniMc-Gigabit, TX/SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	70km - 19dB

### MiniMc-Gigabit - Media Converter Modules

- no AC power adapter included

1.25 Gbps - 1000 Mbps Copper (TX),  
1000 Mbps Fiber (SX or LX)

MODEL #	DESCRIPTION	DISTANCE - dB
<b>MiniMc-Gigabit Module TX/LX</b>		
854-10720	MiniMc-Gigabit Module, TX/SX-MM850-SC	220/550m-7.5dB
854-10721	MiniMc-Gigabit Module, TX/LX-SM1310-SC	10km - 10.5dB
854-10722	MiniMc-Gigabit Module, TX/LX-SM1310/PLUS-SC	40km - 21dB
854-10723	MiniMc-Gigabit Module, TX/LX-SM1550/LONG-SC	80km - 24dB
<b>MiniMc-Gigabit Module TX/LX</b>		
854-10720	MiniMc-Gigabit Module, TX/SX-MM850-SC	220/550m-7.5dB
854-10721	MiniMc-Gigabit Module, TX/LX-SM1310-SC	10km - 10.5dB
854-10722	MiniMc-Gigabit Module, TX/LX-SM1310/PLUS-SC	40km - 21dB
854-10723	MiniMc-Gigabit Module, TX/LX-SM1550/LONG-SC	80km - 24dB
<b>MiniMc-Gigabit Module, Single-strand Fiber</b>		
854-10724	MiniMc-Gigabit Module, TX/SSLX-SM1310-SC 1310xmt/1550rcv)	15km - 12dB
854-10725	MiniMc-Gigabit Module, TX/SSLX-SM1550-SC 1550xmt/1310rcv)	15km - 12dB
854-10752	MiniMc-Gigabit Module, TX/SSBX-SM1310-SC 1310xmt/1490rcv)	10km - 10.5dB
854-10753	MiniMc-Gigabit Module, TX/SSBX-SM1490-SC 1490xmt/1310rcv)	10km - 10.5dB
854-10726	MiniMc-Gigabit Module, TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
854-10727	MiniMc-Gigabit Module, TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
854-10754	MiniMc-Gigabit Module, TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	80km - 24dB
854-10755	MiniMc-Gigabit Module, TX/SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	80km - 24dB

## IE-MiniMc Modules

### IE-MiniMc Module

- no AC power adapter included

10/100 Mbps Switching Copper (TP-TX),  
100 Mbps Fiber (FX) Ethernet

MODEL #	DESCRIPTION	DISTANCE - dB
<b>IE-MiniMc Module, TP-TX/FX</b>		
<i>- using DC or PoE (PD) power, IE temperature range -40°C to +85°C</i>		
854-19720	IE-MiniMc Module, TP-TX/FX-MM850-ST (-20 to +70°C)	2km - 14dB
854-19721	IE-MiniMc Module, TP-TX/FX-MM850-SC (-20 to +70°C)	2km - 14dB
854-19722	IE-MiniMc Module, TP-TX/FX-MM1300-ST	5km - 11dB
854-19723	IE-MiniMc Module, TP-TX/FX-MM1300-SC	5km - 11dB
854-19724	IE-MiniMc Module, TP-TX/FX-SM1310/PLUS-ST	30km - 19dB
854-19725	IE-MiniMc Module, TP-TX/FX-SM1310/PLUS-SC	30km - 19dB
854-19726	IE-MiniMc Module, TP-TX/FX-SM1310/LONG-ST	80km - 31dB
854-19727	IE-MiniMc Module, TP-TX/FX-SM1310/LONG-SC	80km - 31dB
854-19730	IE-MiniMc Module, TP-TX/FX-SM1550/LONG-SC	80km - 31dB
<b>IE-MiniMc Module, Single-strand Fiber</b>		
<i>- using DC or PoE (PD) power, IE temperature range -40°C to +85°C</i>		
854-19750	IE-MiniMc Module, TP-TX/SSFMM1310-SC (1310xmt/1550rcv)	2km - 20dB
854-19751	IE-MiniMc Module, TP-TX/SSFMM1550-SC (1550xmt/1310rcv)	2km - 20dB
854-19752	IE-MiniMc Module, TP-TX/SSFMM1310-SC (1310xmt/1550rcv)	20km - 17dB
854-19753	IE-MiniMc Module, TP-TX/SSFMM1550-SC (1550xmt/1310rcv)	20km - 17dB
854-19754	IE-MiniMc Module, TP-TX/SSFMM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
854-19755	IE-MiniMc Module, TP-TX/SSFMM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
854-19756	IE-MiniMc Module, TP-TX/SSFMM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
854-19757	IE-MiniMc Module, TP-TX/SSFMM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

IE-MiniMc Module, CWDM fiber also available. Call for details.

## ACCESSORIES - MiniMc family series

- supports all temperatures and speed types

MODEL #	DESCRIPTION
850-13086	IE-PowerTray/18-AC (-20 to +70C), 18 slot chassis
806-39720	AC Power Adapter for MiniMc products (10 W, -10 to +50°C)
806-39753	IE-Power/5V Module (MeanWell, -20°C to +70°C)
806-39628	USB Power Cable for MiniMc only (36")
806-39629	USB Power Cable for MiniMc only (12")
806-39638	Double-USB Power Cable for ALL MiniMc models (36")
806-39650	Barrel-Connector Power Cable for IE-Power Modules (12")
806-39105	DIN-mount Clip (not included with DIN-mount products)

## IE-Giga-MiniMc

### IE-Giga-MiniMc

- IE ("Industrial Equipment") = extended temperature range

1.25 Gbps - 10/100/1000 Mbps Switching Copper (TX),  
1000 Mbps Fiber (SX or LX)

- includes AC power adapter, IE temperature range -10°C to +50°C

MODEL #	DESCRIPTION	DISTANCE - dB
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#### IE-Giga-MiniMc TX/LX

- not using AC adapter, IE temperature range -25°C to +85°C

856-18830	IE-Giga-MiniMc, TX/FX-MM850-SC	220/550m-7.5dB
856-18831	IE-Giga-MiniMc, TX/LX-SM1310-SC	10km - 10.5dB
856-18832	IE-Giga-MiniMc, TX/LX-SM1310/PLUS-SC	30km - 21dB
856-18833	IE-Giga-MiniMc, TX/LX-SM1550/LONG-SC	80km - 24dB
856-18834	IE-Giga-MiniMc, TX/LX-SM1550/XLONG-SC (0°C to +70°C)	100km - 32dB

#### IE-Giga-MiniMc, Single-strand Fiber

- not using AC adapter, IE temperature range -25°C to +85°C

856-18835	IE-Giga-MiniMc, TX/SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12dB
856-18836	IE-Giga-MiniMc, TX/SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12dB
856-18825	IE-Giga-MiniMc, TX/SSBX-SM1310-SC (1310xmt/1490rcv)	10km - 12dB
856-18826	IE-Giga-MiniMc, TX/SSBX-SM1490-SC (1490xmt/1310rcv)	10km - 12dB
856-18837	IE-Giga-MiniMc, TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
856-18838	IE-Giga-MiniMc, TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
856-18827	IE-Giga-MiniMc, TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20dB
856-18828	IE-Giga-MiniMc, TX/SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	30km - 20dB
856-18839	IE-Giga-MiniMc, TX/SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	70km - 19dB
856-18840	IE-Giga-MiniMc, TX/SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	70km - 19dB

#### IE-Giga-MiniMc with LFPT TX/LX

- includes AC adapter

- not using AC adapter, IE temperature range -25°C to +85°C

856-18929	IE-Giga-MiniMc/LFPT, TX/SFP (LFPT via dipswitch)	SFP Variable
856-18930	IE-Giga-MiniMc/LFPT, TX/FX-MM850-SC (LFPT via dipswitch)	220/550m-7.5dB
856-18931	IE-Giga-MiniMc/LFPT, TX/LX-SM1310-SC (LFPT via dipswitch)	10km - 10.5dB

### IE-Giga-MiniMc Module

- no AC power adapter included

1.25 Gbps - 10/100/1000 Mbps Switching Copper (TX),  
1000 Mbps Fiber (SX or LX)

MODEL #	DESCRIPTION	DISTANCE - dB
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#### IE-Giga-MiniMc Module TX/LX

- using DC power, IE temperature range -35°C to +70°C

854-18830	IE-Giga-MiniMc Module, TX/SX-MM850-SC	220/550m-7.5dB
854-18831	IE-Giga-MiniMc Module, TX/LX-SM1310-SC	10km - 10.5dB
854-18832	IE-Giga-MiniMc Module, TX/LX-SM1310/PLUS-SC	2km - 12.5dB
854-18833	IE-Giga-MiniMc Module, TX/LX-SM1550/LONG-SC	30km - 24dB
854-18834	IE-Giga-MiniMc Module, TX/LX-SM1550/XLONG-SC (0 to +70°C)	100km - 32dB

#### IE-Giga-MiniMc Module, Single-strand Fiber

- using DC power, IE temperature range -35°C to +70°C

854-18835	IE-Giga-MiniMc Module, TX/SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12dB
854-18836	IE-Giga-MiniMc Module, TX/SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12dB
854-18825	IE-Giga-MiniMc Module, TX/SSBX-SM1310-SC (1310xmt/1490rcv)	10km - 12dB
854-18826	IE-Giga-MiniMc Module, TX/SSBX-SM1490-SC (1490xmt/1310rcv)	10km - 12dB
854-18837	IE-Giga-MiniMc Module, TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
854-18838	IE-Giga-MiniMc Module, TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
854-18827	IE-Giga-MiniMc Module, TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20dB
854-18828	IE-Giga-MiniMc Module, TX/SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	30km - 20dB
854-18839	IE-Giga-MiniMc Module, TX/SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	70km - 19dB
854-18840	IE-Giga-MiniMc Module, TX/SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	70km - 19dB

## IE-MiniMc

### IE-MiniMc, LFPT DSW

- IE ("Industrial Equipment") = extended temperature range

10/100 Mbps Switching Copper (TP-TX), 100 Mbps Fiber (FX) Ethernet

- using included AC power adapter, IE temperature range -10°C to +50°C

MODEL #	DESCRIPTION	DISTANCE - dB
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#### IE-MiniMc, TP-TX/FX

- not using AC adapter, IE temperature range -40°C to +85°C

855-19720	IE-MiniMc, TP-TX/FX-MM850-ST (-20°C to +70°C)	2km - 14dB
855-19721	IE-MiniMc, TP-TX/FX-MM850-SC (-20°C to +70°C)	2km - 14dB
855-19722	IE-MiniMc, TP-TX/FX-MM1300-ST	5km - 11dB
855-19723	IE-MiniMc, TP-TX/FX-MM1300-SC	5km - 11dB
855-19724	IE-MiniMc, TP-TX/FX-SM1310/PLUS-ST	30km - 19dB
855-19725	IE-MiniMc, TP-TX/FX-SM1310/PLUS-SC	30km - 19dB
855-19726	IE-MiniMc, TP-TX/FX-SM1310/LONG-ST	80km - 31dB
855-19727	IE-MiniMc, TP-TX/FX-SM1310/LONG-SC	80km - 31dB
855-19730	IE-MiniMc, TP-TX/FX-SM1550/LONG-SC	80km - 31dB

#### IE-MiniMc, Single-strand Fiber

- not using AC adapter, IE temperature range -40°C to +85°C

855-19750	IE-MiniMc, TP-TX/SSFx-MM1310-SC (1310xmt/1550rcv)	2km - 20dB
855-19751	IE-MiniMc, TP-TX/SSFx-MM1550-SC (1550xmt/1310rcv)	2km - 20dB
855-19752	IE-MiniMc, TP-TX/SSFx-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
855-19753	IE-MiniMc, TP-TX/SSFx-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
855-19754	IE-MiniMc, TP-TX/SSFx-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
855-19755	IE-MiniMc, TP-TX/SSFx-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
855-19756	IE-MiniMc, TP-TX/SSFx-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
855-19757	IE-MiniMc, TP-TX/SSFx-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

IE-MiniMc Module, CWDM fiber also available. Call for details.

### ACCESSORIES - MiniMc family series

- supports all temperatures and speed types

MODEL #	DESCRIPTION
850-13086	IE-PowerTray/18-AC (-20 to +70C), 18 slot chassis
806-39720	AC Power Adapter for MiniMc products (10 W, -10 to +50°C)
806-39753	IE-Power/5V Module (MeanWell, -20°C to +70°C)
806-39628	USB Power Cable for MiniMc only (36")
806-39629	USB Power Cable for MiniMc only (12")
806-39638	Double-USB Power Cable for ALL MiniMc models (36")
806-39650	Barrel-Connector Power Cable for IE-Power Modules (12")
806-39105	DIN-mount Clip (not included with DIN-mount products)

**IE-MiniMc/LFPT**

**IE-MiniMc/LFPT**

10/100 Mbps Switching Copper (TP-TX), 100 Mbps Fiber (FX) Ethernet  
 - using included AC power adapter, IE temperature range -10 to +50°C

MODEL #	DESCRIPTION	DISTANCE - dB
<b>IE-MiniMc/LFPT, TP-TX/FX</b> - not using AC adapter, IE temperature range -40°C to +85°C		
855-19821	IE-MiniMc/LFPT, TP-TX/FX-MM850-ST (-20 to +70°C)	2km - 14dB
855-19822	IE-MiniMc/LFPT, TP-TX/FX-MM850-SC (-20 to +70°C)	2km - 14dB
855-19823	IE-MiniMc/LFPT, TP-TX/FX-MM1300-ST	5km - 11dB
855-19824	IE-MiniMc/LFPT, TP-TX/FX-MM1300-SC	5km - 11dB
855-19829	IE-MiniMc/LFPT, TP-TX/FX-SM1310/PLUS-ST	30km - 19dB
855-19830	IE-MiniMc/LFPT, TP-TX/FX-SM1310/PLUS-SC	30km - 19dB
855-19831	IE-MiniMc/LFPT, TP-TX/FX-SM1310/LONG-ST	80km - 31dB
855-19832	IE-MiniMc/LFPT, TP-TX/FX-SM1310/LONG-SC	80km - 31dB
855-19833	IE-MiniMc/LFPT, TP-TX/FX-SM1550/LONG-SC	80km - 31dB

**IE-MiniMc/LFPT, Single-strand Fiber**

- not using AC adapter, IE temperature range -40°C to +85°C

855-19840	IE-MiniMc/LFPT, TP-TX/SSFx-MM1310-SC (1310xmt/1550rcv)	2km - 20dB
855-19841	IE-MiniMc/LFPT, TP-TX/SSFx-MM1550-SC (1550xmt/1310rcv)	2km - 20dB
855-19842	IE-MiniMc/LFPT, TP-TX/SSFx-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
855-19843	IE-MiniMc/LFPT, TP-TX/SSFx-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
855-19844	IE-MiniMc/LFPT, TP-TX/SSFx-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
855-19845	IE-MiniMc/LFPT, TP-TX/SSFx-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB

IE-MiniMc/LFPT, CWDM fiber also available. Call for details.

**IE-MiniMc/LFPT**

- no AC power adapter included

10/100 Mbps Switching Copper (TP-TX),  
 100 Mbps Fiber (FX) Ethernet

MODEL #	DESCRIPTION	DISTANCE - dB
<b>IE-Power/5V, Meanwell</b> - IE operating temperature range -20°C to +70°C		
806-39753	IE-Power/5V Module (MeanWell)	
<b>IE-MiniMc/LFPT TP-TX/FX</b> - using DC or PoE (PD) power, IE temperature range -40°C to +85°C		
854-19821	IE-MiniMc/LFPT, TP-TX/FX-MM850-ST(-20 to +70°C)	2km - 14dB
854-19822	IE-MiniMc/LFPT, TP-TX/FX-MM850-SC(-20 to +70°C)	2km - 14dB
854-19823	IE-MiniMc/LFPT, TP-TX/FX-MM1300-ST	5km - 11dB
854-19824	IE-MiniMc/LFPT, TP-TX/FX-MM1300-SC	5km - 11dB
854-19829	IE-MiniMc/LFPT, TP-TX/FX-SM1310/PLUS-ST	30km - 19dB
854-19830	IE-MiniMc/LFPT, TP-TX/FX-SM1310/PLUS-SC	30km - 19dB
854-19831	IE-MiniMc/LFPT, TP-TX/FX-SM1310/LONG-ST	80km - 31dB
854-19832	IE-MiniMc/LFPT, TP-TX/FX-SM1310/LONG-SC	80km - 31dB
854-19833	IE-MiniMc/LFPT, TP-TX/FX-SM1550/LONG-SC	80km - 31dB

**IE-MiniMc/LFPT, Single-strand Fiber**

- using DC or PoE (PD) power, IE temperature range -40°C to +85°C

854-19840	IE-MiniMc/LFPT, TP-TX/SSFx-MM1310-SC (1310xmt/1550rcv)	2km - 20dB
854-19841	IE-MiniMc/LFPT, TP-TX/SSFx-MM1550-SC (1550xmt/1310rcv)	2km - 20dB
854-19842	IE-MiniMc/LFPT, TP-TX/SSFx-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
854-19843	IE-MiniMc/LFPT, TP-TX/SSFx-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
854-19844	IE-MiniMc/LFPT, TP-TX/SSFx-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
854-19845	IE-MiniMc/LFPT, TP-TX/SSFx-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
854-19846	IE-MiniMc/LFPT, TP-TX/SSFx-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
854-19847	IE-MiniMc/LFPT, TP-TX/SSFx-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

**ACCESSORIES - IE-MiniMc series**

- supports all temperatures and speed types

MODEL #	DESCRIPTION
850-13086	IE-PowerTray/18-AC (-20 to +70C), 18 slot chassis
806-39720	AC Power Adapter for MiniMc products (10 W, -10 to +50°C)
806-39753	IE-Power/5V Module (MeanWell, -20°C to +70°C)
806-39628	USB Power Cable for MiniMc only (36")
806-39629	USB Power Cable for MiniMc only (12")
806-39638	Double-USB Power Cable for ALL MiniMc models (36")
806-39650	Barrel-Connector Power Cable for IE-Power Modules (12")
806-39105	DIN-mount Clip (not included with DIN-mount products)

## IE-MiniMc/Telco-LFPT

### IE-MiniMc/Telco-LFPT

- IE (Industrial Equipment), extended temperature range

10/100 Mbps Switching Copper (TP-TX),  
100 Mbps Fiber (FX) Ethernet

- using included AC power adapter, IE temperature range -10°C to +50°C

MODEL #	DESCRIPTION	DISTANCE - dB
<b>IE-MiniMc/Telco-LFPT TP-TX/FX</b>		
<i>- not using AC adapter, IE temperature range -40°C to +85°C</i>		
855-19201	IE-MiniMc/Telco-LFPT, TP-TX/FX-MM850-ST(-20 to +70°C)	2km - 14dB
855-19202	IE-MiniMc/Telco-LFPT, TP-TX/FX-MM850-SC(-20 to +70°C)	2km - 14dB
855-19203	IE-MiniMc/Telco-LFPT, TP-TX/FX-MM1300-ST	5km - 11dB
855-19204	IE-MiniMc/Telco-LFPT, TP-TX/FX-MM1300-SC	5km - 11dB
855-19209	IE-MiniMc/Telco-LFPT, TP-TX/FX-SM1310/PLUS-ST	30km - 19dB
855-19210	IE-MiniMc/Telco-LFPT, TP-TX/FX-SM1310/PLUS-SC	30km - 19dB
855-19211	IE-MiniMc/Telco-LFPT, TP-TX/FX-SM1310/LONG-ST	80km - 31dB
855-19212	IE-MiniMc/Telco-LFPT, TP-TX/FX-SM1310/LONG-SC	80km - 31dB
855-19213	IE-MiniMc/Telco-LFPT, TP-TX/FX-SM1550/LONG-SC	80km - 31dB
<b>IE-MiniMc/Telco-LFPT, Single-strand Fiber</b>		
<i>- not using AC adapter, IE temperature range -40°C to +85°C</i>		
855-19220	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-MM1310-SC (1310xmt/1550rcv)	2km - 20dB
855-19221	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-MM1550-SC (1550xmt/1310rcv)	2km - 20dB
855-19222	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
855-19223	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
855-19224	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
855-19225	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
855-19226	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
855-19227	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

### ACCESSORIES - IE-MiniMc series

- supports all temperatures and speed types

MODEL #	DESCRIPTION
850-13086	IE-PowerTray/18-AC (-20 to +70C), I8 slot chassis
806-39720	AC Power Adapter for MiniMc products (10 W, -10 to +50°C)
806-39753	IE-Power/5V Module (MeanWell, -20°C to +70°C)
806-39628	USB Power Cable for MiniMc only (36")
806-39629	USB Power Cable for MiniMc only (12")
806-39638	Double-USB Power Cable for ALL MiniMc models (36")
806-39650	Barrel-Connector Power Cable for IE-Power Modules (12")
806-39105	DIN-mount Clip (not included with DIN-mount products)

### IE-MiniMc/Telco-LFPT

- no AC power adapter included

10/100 Mbps Switching Copper (TP-TX),  
100 Mbps Fiber (FX) Ethernet

MODEL #	DESCRIPTION	DISTANCE - dB
<b>IE-MiniMc/Telco-LFPT, TP-TX/FX</b>		
<i>- using DC or PoE (PD) power, IE temperature range -40°C to +85°C</i>		
854-19201	IE-MiniMc/Telco-LFPT, TP-TX/FX-MM850-ST(-20 to +70°C)	2km - 14dB
854-19202	IE-MiniMc/Telco-LFPT, TP-TX/FX-MM850-SC(-20 to +70°C)	2km - 14dB
854-19203	IE-MiniMc/Telco-LFPT, TP-TX/FX-MM1300-ST	5km - 11dB
854-19204	IE-MiniMc/Telco-LFPT, TP-TX/FX-MM1300-SC	5km - 11dB
854-19209	IE-MiniMc/Telco-LFPT, TP-TX/FX-SM1310/PLUS-ST	30km - 19dB
854-19210	IE-MiniMc/Telco-LFPT, TP-TX/FX-SM1310/PLUS-SC	30km - 19dB
854-19211	IE-MiniMc/Telco-LFPT, TP-TX/FX-SM1310/LONG-ST	80km - 31dB
854-19212	IE-MiniMc/Telco-LFPT, TP-TX/FX-SM1310/LONG-SC	80km - 31dB
854-19213	IE-MiniMc/Telco-LFPT, TP-TX/FX-SM1550/LONG-SC	80km - 31dB
<b>IE-MiniMc/Telco-LFPT, Single-strand Fiber</b>		
<i>- using DC or PoE (PD) power, IE temperature range -40°C to +85°C</i>		
854-19220	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-MM1310-SC (1310xmt/1550rcv)	2km - 20dB
854-19221	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-MM1550-SC (1550xmt/1310rcv)	2km - 20dB
854-19222	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
854-19223	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
854-19224	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
854-19225	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
854-19226	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
854-19227	IE-MiniMc/Telco-LFPT, TP-TX/SSFX-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

*IE-MiniMc/Telco-LFPT, CWDM fiber also available. Call for details.*

# UNMANAGED MEDIA CONVERTERS - continued

## PoE Giga-MiniMc LFPT

PoE Giga-MiniMc, LFPT DSW,  
Miniature Media Converter

- PoE, up to 15.4 Watt, 1 port

1.25 Gbps - 10/100/1000 Mbps Switching Copper (TX),  
1000 Mbps Fiber (SX or LX)

- Includes 30Watt/48Volt, 100-240 VAC adapter

MODEL #	DESCRIPTION	DISTANCE - dB
<b>PoE Giga-MiniMc 2TX/LX</b>		
857-11811	PoE Giga-MiniMc/LFPT, 2TX/SFP-requires one IE-SFP/1250 module	SFP Variable
857-11812	PoE Giga-MiniMc/LFPT, 2TX/SX-MM850-SC	220/550m -7.5dB
857-11813	PoE Giga-MiniMc/LFPT, 2TX/LX-MM1300-SC	2km - 12.5dB
857-11814	PoE Giga-MiniMc/LFPT, 2TX/LX-SM1310-SC	10km - 10.5dB
857-11815	PoE Giga-MiniMc/LFPT, 2TX/LX-SM1310/PLUS-SC	40km - 21dB
857-11816	PoE Giga-MiniMc/LFPT, 2TX/LX-SM1550/LONG-SC	80km - 24dB
857-11817	PoE Giga-MiniMc/LFPT, 2TX/LX-SM1550/XLONG-SC	100km - 32dB
<b>PoE Giga-MiniMc 2TX/LX, Single-strand Fiber</b>		
857-11820	PoE Giga-MiniMc/LFPT, 2TX/SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12dB
857-11821	PoE Giga-MiniMc/LFPT, 2TX/SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12dB
857-11822	PoE Giga-MiniMc/LFPT, 2TX/SSBX-SM1310-SC (1310xmt/1490rcv)	10km - 12dB
857-11823	PoE Giga-MiniMc/LFPT, 2TX/SSBX-SM1490-SC (1490xmt/1310rcv)	10km - 12dB
857-11824	PoE Giga-MiniMc/LFPT, 2TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
857-11825	PoE Giga-MiniMc/LFPT, 2TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
857-11826	PoE Giga-MiniMc/LFPT, 2TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20dB
857-11827	PoE Giga-MiniMc/LFPT, 2TX/SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	30km - 20dB
857-11828	PoE Giga-MiniMc/LFPT, 2TX/SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	70km - 19dB
857-11829	PoE Giga-MiniMc/LFPT, 2TX/SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	70km - 19dB

PoE Giga-MiniMc/LPFT, CWDM fiber also available. Call for details.

## PoE & PoE+ Giga-MiniMc Power Adapters

### PoE/PoE+ Power Adapters

MODEL #	DESCRIPTION	DISTANCE - dB
<b>ACCESSORIES - for PoE/PoE+ Giga-MiniMc</b>		
806-39800	PoE Power Adapter (for PoE Giga-MiniMc)	Up to 15.4 Watt
806-39900	PoE+ Power Adapter (for PoE+ Giga-MiniMc)	Up to 25.4 Watt
806-39910	PoE+ Isolated Power Adapter (for PoE+ Giga-MiniMc)	Up to 25.4 Watt

## PoE Giga-MiniMc, LFPT DSW, Miniature Media Converter

- PoE, PoE+ = up to 25.5 Watt, 2 ports

1.25 Gbps - 10/100/1000 Mbps Switching Copper (TX),  
1000 Mbps Fiber (SX or LX)

- Includes 100Watt/54Volt, 100-240 VAC adapter

MODEL #	DESCRIPTION	DISTANCE - dB
<b>PoE+ Giga-MiniMc/LFPT 2TX/LX</b>		
857-11911	PoE+ Giga-MiniMc/LFPT, 2TX/SFP-requires one IE-SFP/1250 module	SFP Variable
857-11912	PoE+ Giga-MiniMc/LFPT, 2TX/SX-MM850-SC	220/550m -7.5dB
857-11913	PoE+ Giga-MiniMc/LFPT, 2TX/LX-MM1300-SC	2km - 12.5dB
857-11914	PoE+ Giga-MiniMc/LFPT, 2TX/LX-SM1310-SC	10km - 10.5dB
857-11915	PoE+ Giga-MiniMc/LFPT, 2TX/LX-SM1310/PLUS-SC	40km - 21dB
857-11916	PoE+ Giga-MiniMc/LFPT, 2TX/LX-SM1550/LONG-SC	80km - 24dB
857-11917	PoE+ Giga-MiniMc/LFPT, 2TX/LX-SM1550/XLONG-SC	100km - 32dB
<b>PoE+ Giga-MiniMc/LFPT, Single-strand Fiber</b>		
857-11920	PoE+ Giga-MiniMc/LFPT, 2TX/SSLX-SM1310-SC(1310xmt/1550rcv)	15km - 12dB
857-11921	PoE+ Giga-MiniMc/LFPT, 2TX/SSLX-SM1550-SC(1550xmt/1310rcv)	15km - 12dB
857-11922	PoE+ Giga-MiniMc/LFPT, 2TX/SSBX-SM1310-SC(1310xmt/1490rcv)	10km - 12dB
857-11923	PoE+ Giga-MiniMc/LFPT, 2TX/SSBX-SM1490-SC(1490xmt/1310rcv)	10km - 12dB
857-11924	PoE+ Giga-MiniMc/LFPT, 2TX/SSLX-SM1310/PLUS-SC(1310xmt/1550rcv)	40km - 20dB
857-11925	PoE+ Giga-MiniMc/LFPT, 2TX/SSLX-SM1550/PLUS-SC(1550xmt/1310rcv)	40km - 20dB
857-11926	PoE+ Giga-MiniMc/LFPT, 2TX/SSBX-SM1310/PLUS-SC(1310xmt/1490rcv)	30km - 20dB
857-11927	PoE+ Giga-MiniMc/LFPT, 2TX/SSBX-SM1490/PLUS-SC(1490xmt/1310rcv)	30km - 20dB
857-11928	PoE+ Giga-MiniMc/LFPT, 2TX/SSLX-SM1490/LONG-SC(1490xmt/1550rcv)	70km - 19dB
857-11929	PoE+ Giga-MiniMc/LFPT, 2TX/SSLX-SM1550/LONG-SC(1550xmt/1490rcv)	70km - 19dB

PoE+ Giga-MiniMc/LPFT, CWDM fiber also available. Call for details.

## Giga-McBasic-II

### Giga-McBasic-II

10/100/1000 Mbps 3-port Gigabit Media Converter

MODEL #	DESCRIPTION	DISTANCE - dB
<b>Giga-McBasic-II TX/LX</b>		
856-30600	Giga-McBasic-II, TX/SFP (requires one SFP/1250-ED module)	Variable
856-30601	Giga-McBasic-II, TX/SX-MM850-SC	220/500m-7.5dB
856-30602	Giga-McBasic-II, TX/SX-MM1300-SC	5km - 12.5 dB
856-30603	Giga-McBasic-II, TX/LX-SM1310-SC	10km - 10.5 dB
856-30604	Giga-McBasic-II, TX/LX-SM1310/PLUS-SC	40km - 21 dB
856-30605	Giga-McBasic-II, TX/LX-SM1550/LONG-SC	80km - 24 dB
856-30606	Giga-McBasic-II, TX/LX-SM1550/XLONG-SC	100km - 32 dB
<b>Giga-McBasic-II, Single-strand Fiber</b>		
856-30620	Giga-McBasic-II, TX/SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12 dB
856-30621	Giga-McBasic-II, TX/SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12 dB
856-30622	Giga-McBasic-II, TX/SSBX-SM1310-SC (1310xmt/1490rcv)	10km - 12 dB
856-30623	Giga-McBasic-II, TX/SSBX-SM1490-SC (1490xmt/1310rcv)	10km - 12 dB
856-30624	Giga-McBasic-II, TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 21 dB
856-30625	Giga-McBasic-II, TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 21 dB
856-30626	Giga-McBasic-II, TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20 dB
856-30627	Giga-McBasic-II, TX/SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	30km - 20 dB
856-30628	Giga-McBasic-II, TX/SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	60km - 19 dB
856-30629	Giga-McBasic-II, TX/SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	60km - 19 dB

## PoE McBasic LFPT

### PoE McBasic, LFPT DSW, Miniature Media Converter - PoE, up to 15.4 Watt

10/100 Mbps (TX), 100 Mbps Fiber (FX)

MODEL #	DESCRIPTION	DISTANCE - dB
<b>PoE McBasic 2TX/LX</b>		
852-11712	PoE McBasic/LFPT, 2TX/FX-MM850-ST	2km - 14dB
852-11713	PoE McBasic/LFPT, 2TX/FX-MM850-SC	2km - 14dB
852-11714	PoE McBasic/LFPT, 2TX/FX-MM1300-ST	5km - 11dB
852-11715	PoE McBasic/LFPT, 2TX/FX-MM1300-SC	5km - 11dB
852-11716	PoE McBasic/LFPT, 2TX/FX-SM1310/PLUS-ST	40km - 19dB
852-11717	PoE McBasic/LFPT, 2TX/FX-SM1310/PLUS-SC	40km - 19dB
852-11718	PoE McBasic/LFPT, 2TX/FX-SM1310/LONG-ST	80km - 31dB
852-11719	PoE McBasic/LFPT, 2TX/FX-SM1310/LONG-SC	80km - 31dB
852-11720	PoE McBasic/LFPT, 2TX/FX-SM1550/LONG-SC	80km - 31dB

#### PoE McBasic/LFPT, Single-strand Fiber

852-11730	PoE McBasic/LFPT, 2TX/SSFx-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
852-11731	PoE McBasic/LFPT, 2TX/SSFx-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
852-11732	PoE McBasic/LFPT, 2TX/SSFx-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
852-11733	PoE McBasic/LFPT, 2TX/SSFx-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
852-11734	PoE McBasic/LFPT, 2TX/SSFx-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
852-11735	PoE McBasic/LFPT, 2TX/SSFx-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

PoE McBasic/LPFT, CWDM fiber also available. Call for details.

## PoE Giga-McBasic LFPT

### PoE Giga-McBasic, LFPT DSW, Media Converter - PoE, up to 15.4 Watt

1.25 Gbps - 10/100/1000 Mbps Switching Copper (TX), 1000 Mbps Fiber (SX or LX)

MODEL #	DESCRIPTION	DISTANCE - dB
<b>PoE Giga-McBasic/LFPT 2TX/LX</b>		
852-11811	PoE Giga-McBasic/LFPT, 2TX/SFP (requires one IE-SFP/1250 module)	SFP Variable
852-11812	PoE Giga-McBasic/LFPT, 2TX/SX-MM850-SC	220/550m-7.5dB
852-11813	PoE Giga-McBasic/LFPT, 2TX/LX-MM1300-SC	2km - 12.5dB
852-11814	PoE Giga-McBasic/LFPT, 2TX/LX-SM1310-SC	10km - 10.5dB
852-11815	PoE Giga-McBasic/LFPT, 2TX/LX-SM1310/PLUS-SC	40km - 21dB
852-11816	PoE Giga-McBasic/LFPT, 2TX/LX-SM1550/LONG-SC	80km - 24dB
852-11817	PoE Giga-McBasic/LFPT, 2TX/LX-SM1550/XLONG-SC	100km - 32dB

#### PoE Giga-McBasic/LFPT, Single-strand Fiber

852-11820	PoE Giga-McBasic/LFPT, 2TX/SSLX-SM1310-SC(1310xmt/1550rcv)	15km - 12dB
852-11821	PoE Giga-McBasic/LFPT, 2TX/SSLX-SM1550-SC(1550xmt/1310rcv)	15km - 12dB
852-11822	PoE Giga-McBasic/LFPT, 2TX/SSBX-SM1310-SC(1310xmt/1490rcv)	10km - 12dB
852-11823	PoE Giga-McBasic/LFPT, 2TX/SSBX-SM1490-SC(1490xmt/1310rcv)	10km - 12dB
852-11824	PoE Giga-McBasic/LFPT, 2TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
852-11825	PoE Giga-McBasic/LFPT, 2TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
852-11826	PoE Giga-McBasic/LFPT, 2TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20dB
852-11827	PoE Giga-McBasic/LFPT, 2TX/SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	30km - 20dB
852-11828	PoE Giga-McBasic/LFPT, 2TX/SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	70km - 19dB
852-11829	PoE Giga-McBasic/LFPT, 2TX/SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	70km - 19dB

PoE Giga-McBasic/LPFT, CWDM fiber also available. Call for details.

### PoE+ Giga-McBasic, LFPT DSW, Media Converter - PoE/PoE+, up to 25.5 Watt

1.25 Gbps - 10/100/1000 Mbps Switching Copper (TX), 1000 Mbps Fiber (SX or LX)

MODEL #	DESCRIPTION	DISTANCE - dB
<b>PoE+ Giga-McBasic/LFPT 2TX/LX</b>		
852-11911	PoE+ Giga-McBasic/LFPT, 2TX/SFP (requires one IE-SFP/1250 module)	SFP Variable
852-11912	PoE+ Giga-McBasic/LFPT, 2TX/SX-MM850-SC	220/550m-7.5dB
852-11913	PoE+ Giga-McBasic/LFPT, 2TX/LX-MM1300-SC	2km - 12.5dB
852-11914	PoE+ Giga-McBasic/LFPT, 2TX/LX-SM1310-SC	10km - 10.5dB
852-11915	PoE+ Giga-McBasic/LFPT, 2TX/LX-SM1310/PLUS-SC	40km - 21 dB
852-11916	PoE+ Giga-McBasic/LFPT, 2TX/LX-SM1550/LONG-SC	80km - 24dB
852-11917	PoE+ Giga-McBasic/LFPT, 2TX/LX-SM1550/XLONG-SC	100km - 32dB

#### PoE+ Giga-McBasic/LFPT, Single-strand Fiber

852-11920	PoE+ Giga-McBasic/LFPT, 2TX/SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12dB
852-11921	PoE+ Giga-McBasic/LFPT, 2TX/SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12dB
852-11922	PoE+ Giga-McBasic/LFPT, 2TX/SSBX-SM1310-SC (1310xmt/1490rcv)	10km - 12dB
852-11923	PoE+ Giga-McBasic/LFPT, 2TX/SSBX-SM1490-SC (1490xmt/1310rcv)	10km - 12dB
852-11924	PoE+ Giga-McBasic/LFPT, 2TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
852-11925	PoE+ Giga-McBasic/LFPT, 2TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
852-11926	PoE+ Giga-McBasic/LFPT, 2TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20dB
852-11927	PoE+ Giga-McBasic/LFPT, 2TX/SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	30km - 20dB
852-11928	PoE+ Giga-McBasic/LFPT, 2TX/SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	70km - 19dB
852-11929	PoE+ Giga-McBasic/LFPT, 2TX/SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	70km - 19dB

# UNMANAGED MEDIA CONVERTERS - continued

## McBasic

### McBasic, Single-Conversion Media Converter

100 Mbps Fast Ethernet Copper, 100 Mbps Fiber

MODEL #	DESCRIPTION	DISTANCE - dB
<b>McBasic TX/FX</b>		
855-10511	McBasic, TX/FX-MM850-ST	2km - 14dB
855-10930	McBasic, TX/FX-MM850-SC	2km - 14dB
855-10927	McBasic, TX/FX-MM1300-ST	5km - 11dB
855-10928	McBasic, TX/FX-MM1300-SC	5km - 11dB
855-10931	McBasic, TX/FX-SM1310/PLUS-ST	40km - 19dB
855-10932	McBasic, TX/FX-SM1310/PLUS-SC	40km - 19dB
855-10933	McBasic, TX/FX-SM1310/LONG-ST	80km - 31dB
855-10934	McBasic, TX/FX-SM1310/LONG-SC	80km - 31dB
855-10937	McBasic, TX/FX-SM1550/LONG-SC	80km - 31dB
<b>McBasic TX/FX, Single-strand Fiber</b>		
855-10949	McBasic, TX/SSFx-MM1310-SC (1310xmt/1550rcv)	2km - 20dB
855-10950	McBasic, TX/SSFx-MM1550-SC (1550xmt/1310rcv)	2km - 20dB
855-10951	McBasic, TX/SSFx-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
855-10952	McBasic, TX/SSFx-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
855-10953	McBasic, TX/SSFx-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
855-10954	McBasic, TX/SSFx-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
855-10955	McBasic, TX/SSFx-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
855-10957	McBasic, TX/SSFx-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

1.25 Gbps Gigabit Ethernet

- with Link Fault Pass-Thru (LFPT) Feature

MODEL #	DESCRIPTION	DISTANCE - dB
<b>McBasic-Gigabit, 1000 Mbps Copper to 1000 Mbps Fiber</b>		
855-11913	McBasic-Gigabit, TX/SX-MM850-SC	220/550m-7.5dB
855-11914	McBasic-Gigabit, TX/LX-SM1310-SC	10km - 10.5dB
855-11915	McBasic-Gigabit, TX/LX-SM1310/PLUS-SC	40km - 21dB
855-11917	McBasic-Gigabit, TX/LX-SM1550/LONG-SC	80km - 24dB
855-11918	McBasic-Gigabit, TX/LX-SM1550/XLONG-SC	100km - 32dB
<b>McBasic-Gigabit, Single-strand Fiber</b>		
855-11844	McBasic-Gigabit, TX/SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12dB
855-11845	McBasic-Gigabit, TX/SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12dB
855-11824	McBasic-Gigabit, TX/SSBX-SM1310-SC (1310xmt/1490rcv)	10km - 12dB
855-11825	McBasic-Gigabit, TX/SSBX-SM1490-SC (1490xmt/1310rcv)	10km - 12dB
855-11846	McBasic-Gigabit, TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
855-11847	McBasic-Gigabit, TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
855-11826	McBasic-Gigabit, TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20dB
855-11827	McBasic-Gigabit, TX/SSBX-SM1450/PLUS-SC (1490xmt/1310rcv)	30km - 20dB
855-11850	McBasic-Gigabit, TX/SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	70km - 19dB
855-11851	McBasic-Gigabit, TX/SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	70km - 19dB

## AccessConverter/3

### AccessConverter/3 (Unmanaged)

10/100 Mbps AutoNegotiating Copper (TX),  
100 Mbps Fiber (FX) Ethernet

MODEL #	DESCRIPTION	DISTANCE - dB
<b>AccessConverter TX/3 + Uplink</b>		
852-10140	AccessConverter, TX/3 + TX	100m
852-10150	AccessConverter, TX/3 + FX-MM850-ST	2km - 14dB
852-10151	AccessConverter, TX/3 + FX-MM850-SC	2km - 14dB
852-10141	AccessConverter, TX/3 + FX-MM1300-ST	5km - 11dB
852-10142	AccessConverter, TX/3 + FX-MM1300-SC	5km - 11dB
852-10141-MT	AccessConverter, TX/3 + FX-MM1300-MT	5km - 11dB
852-10143	AccessConverter, TX/3 + FX-SM1310/PLUS-ST	40km - 19dB
852-10144	AccessConverter, TX/3 + FX-SM1310/PLUS-SC	40km - 19dB
852-10145	AccessConverter, TX/3 + FX-SM1310/LONG-ST	80km - 31dB
852-10146	AccessConverter, TX/3 + FX-SM1310/LONG-SC	80km - 31dB
852-10147	AccessConverter, TX/3 + FX-SM1550/LONG-SC	80km - 31dB
<b>AccessConverter TX/3 +, Single-strand Fiber Uplink</b>		
852-10153	AccessConverter, TX/3 + SSFX-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
852-10154	AccessConverter, TX/3 + SSFX-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
852-10155	AccessConverter, TX/3 + SSFX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
852-10156	AccessConverter, TX/3 + SSFX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
852-10157	AccessConverter, TX/3 + SSFX-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
852-10158	AccessConverter, TX/3 + SSFX-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

## McPIM & McLIM

### Mc Modules for MediaConverter Chassis

10 Mbps Ethernet

MODEL #	DESCRIPTION	DISTANCE - dB
<b>McPIM TP/FO, 10 Mbps Copper to 10 Mbps Fiber</b>		
855-12840	McPIM, TP/FO-MM850-ST	2km - 14dB
855-12841	McPIM, TP/FO-MM850-SC	2km - 14dB
855-12842	McPIM, TP/FO-MM1300-ST	2km - 14dB
855-12843	McPIM, TP/FO-MM1300-SC	2km - 14dB
855-12844	McPIM, TP/FO-SM1310/PLUS-ST	40km - 19dB
855-12845	McPIM, TP/FO-SM1310/PLUS-SC	40km - 19dB
855-12846	McPIM, TP/FO-SM1310/LONG-ST	40km - 19dB
855-12847	McPIM, TP/FO-SM1310/LONG-SC	40km - 19dB
855-12848	McPIM, TP/FO-SM1550/LONG-ST	80km - 31dB
855-12849	McPIM, TP/FO-SM1550/LONG-SC	80km - 31dB

100 Mbps Fast Ethernet

McLIM TX/FX, with MDI/MDX

855-12662	McLIM, TX/SX-MM850-ST	2km - 14dB
855-12663	McLIM, TX/SX-MM850-SC	2km - 14dB
855-12660	McLIM, TX/FX-MM1300-ST	5km - 11dB
855-12661	McLIM, TX/FX-MM1300-SC	5km - 11dB
855-12664	McLIM, TX/FX-SM1310/PLUS-ST	40km - 19dB
855-12665	McLIM, TX/FX-SM1310/PLUS-SC	40km - 19dB
855-12668	McLIM, TX/FX-SM1310/LONG-SC	80km - 31dB
855-12669	McLIM, TX/FX-SM1550/LONG-SC	80km - 31dB

McLIM TX/FX, Single-strand Fiber

855-12680	McLIM, TX/SSFx-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
855-12681	McLIM, TX/SSFx-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
855-12682	McLIM, TX/SSFx-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
855-12683	McLIM, TX/SSFx-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
855-12684	McLIM, TX/SSFx-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
855-12685	McLIM, TX/SSFx-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

10/100 Mbps Switching Copper (TP-TX), 100 Mbps Fiber (FX) Ethernet

McLIM TP-TX/FX, 10/100 Mbps Copper to 100 Mbps Fiber

855-12620	McLIM, TP-TX/SX-MM850-ST	220/550m-7.5dB
855-12621	McLIM, TP-TX/SX-MM850-SC	220/550m-7.5dB
855-12622	McLIM, TP-TX/FX-MM1300-ST	5km - 11dB
855-12622-RX	McLIM, TP-TX/FX-MM1300-ST (RX only)	5km - 11dB
855-12622-TX	McLIM, TP-TX/FX-MM1300-ST (TX only)	5km - 11dB
855-12623	McLIM, TP-TX/FX-MM1300-SC	5km - 11dB
855-12624	McLIM, TP-TX/FX-SM1310/PLUS-ST	40km - 19dB
855-12625	McLIM, TP-TX/FX-SM1310/PLUS-SC	40km - 19dB

McLIM TP-TX/FX, Single-strand Fiber

855-12642	McLIM, TP-TX/SSFx-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
855-12643	McLIM, TP-TX/SSFx-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
855-12644	McLIM, TP-TX/SSFx-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
855-12645	McLIM, TP-TX/SSFx-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB

## McGigabit

### McGigabit - 1.25 Gbps Gigabit Ethernet

MODEL #	DESCRIPTION	DISTANCE - dB
<b>McGigabit TX/LX, 1000 Mbps Copper to 1000 Mbps Fiber</b>		
855-12670	McGigabit, TX/SX-MM850-SC	220/550m-7.5dB
855-12691	McGigabit, TX/SX-MM1300-SC	2km - 12.5dB
855-12671	McGigabit, TX/LX-SM1310-SC	10km-10.5dB
855-12672	McGigabit, TX/LX-SM1310/PLUS-SC	40km - 21dB
855-12673	McGigabit, TX/LX-SM1550/LONG-SC	80km - 24dB
<b>McGigabit TX/SSLX, Single-strand Fiber</b>		
855-12674	McGigabit, TX/SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12dB
855-12675	McGigabit, TX/SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12dB
855-12694	McGigabit, TX/SSBX-SM1310-SC (1310xmt/1490rcv)	10km - 12dB
855-12695	McGigabit, TX/SSBX-SM1490-SC (1490xmt/1310rcv)	10km - 12dB
855-12676	McGigabit, TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
855-12677	McGigabit, TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
855-12696	McGigabit, TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20dB
855-12697	McGigabit, TX/SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	30km - 20dB
855-12686	McGigabit, TX/SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	70km - 19dB
855-12687	McGigabit, TX/SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	70km - 19dB

ACCESSORIES - see page 56 for media chassis products.

## McPC

### McPC Single-Conversion Media Converter PC Cards

#### 100 Mbps Fast Ethernet

MODEL #	DESCRIPTION	DISTANCE - dB
<b>McPC TX/FX (auto MDI/MDX)</b>		
855-12127	McPC/PCI, TX/FX-MM1300-ST	5km - 11dB
855-12128	McPC/PCI, TX/FX-MM1300-SC	5km - 11dB
855-12328	McPC/PCI, TX/FX-SM1310/PLUS-SC	40km - 19dB

#### 10/100 Mbps Switching Ethernet

- 10/100 Mbps Copper to 100 Mbps Fiber

MODEL #	DESCRIPTION	DISTANCE - dB
<b>McPC MediaLinX</b>		
855-12731	McPC/PCI-MediaLinX-MM850-SC	2km - 14dB
855-12732	McPC/PCI-MediaLinX-MM1300-ST	5km - 11dB
855-15732	McPC/LowPCI-MediaLinX-MM1300-ST	5km - 11dB
855-12733	McPC/PCI-MediaLinX-MM1300-SC	5km - 11dB
855-12733-RX	McPC/PCI-MediaLinX-MM1300-SC (RX only)	5km - 11dB
855-12733-TX	McPC/PCI-MediaLinX-MM1300-SC (TX only)	5km - 11dB
855-15733	McPC/LowPCI-MediaLinX-MM1300-SC	5km - 11dB
855-12735	McPC/PCI-MediaLinX-SM1310/PLUS-SC	40km - 19dB
855-15735	McPC/LowPCI-MediaLinX-SM1310/PLUS-SC	40km - 19dB

#### 1.25 Gbps Gigabit Ethernet

- 1000 Mbps Copper to 1000 Mbps Fiber

MODEL #	DESCRIPTION	DISTANCE - dB
<b>McPC-Gigabit TX/LX</b>		
855-12900	McPC/PCI-Gigabit, TX/SX-MM850-SC	220/550m-7.5dB
855-12901	McPC/PCI-Gigabit, TX/LX-SM1310-SC	10km - 10.5dB
855-12902	McPC/PCI-Gigabit, TX/LX-SM1310/PLUS-SC	40km - 21dB
855-12903	McPC/PCI-Gigabit, TX/LX-SM1550/LONG-SC	80km - 24dB

#### McPC-Gigabit, Single-strand Fiber

855-12904	McPC/PCI-Gigabit, TX/SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12dB
855-12905	McPC/PCI-Gigabit, TX/SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12dB
855-12906	McPC/PCI-Gigabit, TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
855-12907	McPC/PCI-Gigabit, TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB

#### 1.25 Gbps Switching Gigabit Ethernet

- 10/100/1000 Mbps Copper to 1000 Mbps Fiber

MODEL #	DESCRIPTION	DISTANCE - dB
<b>McPC-Giga-MediaLinX</b>		
855-15919	McPC/LowPCI-GigaMediaLinX, TX/SFP	SFP Variable
855-12920	McPC/PCI-Giga-MediaLinX, TX/SX-MM850-SC	220/550m-7.5dB
855-12920-RX	McPC/PCI-Giga-MediaLinX, TX/SX-MM850-SC (RX only)	220/550m-7.5dB
855-12920-TX	McPC/PCI-Giga-MediaLinX, TX/SX-MM850-SC (TX only)	220/550m-7.5dB
855-15920	McPC/LowPCI-Giga-MediaLinX, TX/SX-MM850-SC	220/550m-7.5dB
855-12921	McPC/PCI-Giga-MediaLinX, TX/LX-SM1310-SC	10km-10.5dB
855-15921	McPC/LowPCI-Giga-MediaLinX, TX/LX-SM1310-SC	10km-10.5dB
855-12922	McPC/PCI-Giga-MediaLinX, TX/LX-SM1310/PLUS-SC	40km - 21dB
<b>McPC-Giga-MediaLinX, Single-strand Fiber</b>		
855-12927	McPC/PCI-Giga-MediaLinX, TX/SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12dB
855-12928	McPC/PCI-Giga-MediaLinX, TX/SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12dB
855-12929	McPC/PCI-Giga-MediaLinX, TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
855-12930	McPC/PCI-Giga-MediaLinX, TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB

### ACCESSORIES - McPC series

MODEL #	DESCRIPTION
806-39230	SATA Cable for McPC

## Elx series

### Stand-alone Media Converters

#### 10/100 Base-TX to 100Base-FX

- power supply included

MODEL #	DESCRIPTION	DISTANCE
<b>EIS-x-Sx series</b>		
EIS-M-ST	(1) RJ45, Multi-mode ST, w/USA power supply	2km
EIS-M-ST-EU	(1) RJ45, Multi-mode ST, w/EU European power supply	2km
EIS-M-ST-UK	(1) RJ45, Multi-mode ST, w/U.K. power supply	2km
EIS-M-SC	(1) RJ45, Multi-mode SC, w/USA power supply	2km
EIS-M-SC-EU	(1) RJ45, Multi-mode SC, w/EU European power supply	2km
EIS-M-SC-UK	(1) RJ45, Multi-mode SC, w/U.K. power supply	2km
EIS-S-SC	(1) RJ45, Single-mode SC, w/USA power supply	20km
EIS-S-SC-EU	(1) RJ45, Single-mode SC, w/EU European power supply	20km
EIS-S-SC-UK	(1) RJ45, Single-mode SC, w/U.K. power supply	20km

### ACCESSORIES - EIS-x-Sx series

MODEL #	DESCRIPTION
EIS-RACK-16	Media Converter 19" 2U Chassis, 16 slots

#### Industrial Hardened 10/100 Base-TX to 100Base-FX

- power supply not included, sold separately

MODEL #	DESCRIPTION	DISTANCE-dB
<b>EIR-x-Sx series</b>		
EIR-M-ST	(1) RJ45, Multi-mode ST, wide temperature, C1/D2, NEMA TS2	2km
EIR-M-SC	(1) RJ45, Multi-mode SC, wide temperature, C1/D2, NEMA TS2	2km
EIR-S-SC	(1) RJ45, Single-mode SC, wide temperature, C1/D2, NEMA TS2	20km

#### 1000Base-T to Gigabit SFP

- power supply included

MODEL #	DESCRIPTION	DISTANCE-dB
<b>EIS-G-SFP</b>		
EIS-G-SFP	(1) 1000Base-T, (1) GB/SFP, w/USA power supply	SFP Variable
EIS-G-SFP-EU	(1) 1000Base-T, (1) GB/SFP, w/European EU power supply	SFP Variable
EIS-G-SFP-UK	(1) 1000Base-T, (1) GB/SFP, w/U.K. power supply	SFP Variable

#### Industrial Hardened 10/100/1000Base-T to Gigabit SFP

- power supply not included, sold separately

MODEL #	DESCRIPTION	DISTANCE-dB
EIR-G-SFP-T	(1) 10/100/1000Base-T, (1) GB/SFP, wide temperature, NEMA TS2	SFP Variable

# MODELS | SKU & DESCRIPTION

## MANAGED MEDIA CONVERTERS

### IE-iMcV-2xLIM

#### IE-iMcV-Gigabit Media Converters

100 Mbps Fast Ethernet

- Link Fault Pass-Thru (LFPT) Feature, Config Control
- Chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<b>IE-iMcV-2xLIM, Double Converter</b>		
- IE temperature range -40°C to +80°C		
850-18610	IE-iMcV-2xLIM, TX/SFP, requires IE-SFP/155 module(s)	SFP Variable

### IE-iMcV- & iMcV-Gigabit

#### iMcV-Gigabit Media Converters

1.25 Gbps Gigabit Ethernet

- with Link Fault Pass-Thru (LFPT) Feature, Config Control
- Chassis required

MODEL #	DESCRIPTION	DISTANCE-dB
<b>IE-iMcV-Gigabit, with SFP port(s), IE temperature range -40°C to +85°C</b>		
850-18510	IE-iMcV-Gigabit, TX/SFP (requires one IE-SFP/1250 module)	SFP Variable

#### iMcV-Gigabit TX/FX, 1000 Mbps Copper to 1000 Mbps Fiber

850-15511	iMcV-Gigabit, TX/SX-MM850-SC	220/550m-7.5dB
850-15512	iMcV-Gigabit, TX/LX-SM1310-SC	10km-10.5dB
850-15513	iMcV-Gigabit, TX/LX-SM1310/PLUS-SC	40km-21dB
850-15514	iMcV-Gigabit, TX/LX-SM1550/LONG-SC	80km-24dB
850-15515	iMcV-Gigabit, TX/LX-SM1550/XLONG-SC	100km-32dB

#### iMcV-Gigabit, Single-strand Fiber

850-15521	iMcV-Gigabit, TX/SSLX-SM1310-SC (1310xmt/1550rcv)	10 km-12 dB
850-15522	iMcV-Gigabit, TX/SSLX-SM1550-SC (1550xmt/1310rcv)	10 km-12 dB
850-15523	iMcV-Gigabit, TX/SSBX-SM1310-SC (1310xmt/1490rcv)	10 km-12 dB
850-15524	iMcV-Gigabit, TX/SSBX-SM1490-SC (1490xmt/1310rcv)	10 km-12 dB
850-15525	iMcV-Gigabit, TX/SSLX-SM1310/PLUS-SC(1310xmt/1550rcv)	40 km-20 dB
850-15526	iMcV-Gigabit, TX/SSLX-SM1550/PLUS-SC(1550xmt/1310rcv)	40 km-20 dB
850-15527	iMcV-Gigabit, TX/SSBX-SM1310/PLUS-SC(1310xmt/1490rcv)	30 km-20 dB
850-15528	iMcV-Gigabit, TX/SSBX-SM1490/PLUS-SC(1490xmt/1310rcv)	30 km-20 dB
850-15529	iMcV-Gigabit, TX/SSLX-SM1490/LONG-SC(1490xmt/1550rcv)	70 km-19 dB
850-15530	iMcV-Gigabit, TX/SSLX-SM1550/LONG-SC(1550xmt/1490rcv)	70 km-19 dB

*iMcV-Gigabit, CWDM fiber also available. Call for details.*

### iMcV-PIM

#### iMcV-PIM Media Converters

10 Mbps Ethernet

- chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<b>iMcV-PIM, TP/FO, 10 Mbps Copper to 10 Mbps Fiber</b>		
850-14940	iMcV-PIM, TP/FO-MM850-ST	2km - 14dB
850-14941	iMcV-PIM, TP/FO-MM850-SC	2km - 14dB
850-14942	iMcV-PIM, TP/FO-MM1300-ST	2km - 11dB
850-14943	iMcV-PIM, TP/FO-MM1300-SC	2km - 11dB
850-14944	iMcV-PIM, TP/FO-SM1310/PLUS-ST	40km - 19dB
850-14945	iMcV-PIM, TP/FO-SM1310/PLUS-SC	40km - 19dB
850-14946	iMcV-PIM, TP/FO-SM1310/LONG-ST	40km - 31dB
850-14947	iMcV-PIM, TP/FO-SM1310/LONG-SC	40km - 31dB
850-14949	iMcV-PIM, TP/FO-SM1550/LONG-SC	80km - 31dB

### iMcV-LIM

#### iMcV-LIM Media Converters

100 Mbps Fast Ethernet

- with Link Fault Pass-Thru (LFPT) Feature, Config Control
- Chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<b>iMcV-LIM, TX/FX, 100 Mbps Copper to 100 Mbps Fiber</b>		
850-15611	iMcV-LIM, TX/FX-MM850-ST	2km - 14dB
850-15612	iMcV-LIM, TX/FX-MM850-SC	2km - 14dB
850-15613	iMcV-LIM, TX/FX-MM1300-ST	5km - 11dB
850-15614	iMcV-LIM, TX/FX-MM1300-SC	5km - 11dB
850-15617	iMcV-LIM, TX/FX-SM1310/PLUS-ST	40km - 19dB
850-15618	iMcV-LIM, TX/FX-SM1310/PLUS-SC	40km - 19dB
850-15619	iMcV-LIM, TX/FX-SM1310/LONG-ST	80km - 31dB
850-15620	iMcV-LIM, TX/FX-SM1310/LONG-SC	80km - 31dB
850-15622	iMcV-LIM, TX/FX-SM1550/LONG-SC	80km - 31dB
850-15623	iMcV-LIM, TX/FX-SM1550/XLONG-SC	100km - 38dB

#### iMcV-LIM, TX/FX, Single-strand Fiber

850-15631	iMcV-LIM, TX/SSFX-MM1310-SC (1310xmt/1550rcv)	2km - 20dB
850-15632	iMcV-LIM, TX/SSFX-MM1550-SC (1550xmt/1310rcv)	2km - 20dB
850-15633	iMcV-LIM, TX/SSFX-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
850-15634	iMcV-LIM, TX/SSFX-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
850-15635	iMcV-LIM, TX/SSFX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
850-15636	iMcV-LIM, TX/SSFX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
850-15637	iMcV-LIM, TX/SSFX-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
850-15638	iMcV-LIM, TX/SSFX-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

*iMcV-LIM, CWDM fiber also available. Call for details.*

## IE-iMcV - & iMcV-MediaLinX

### iMcV-MediaLinX Modules - Switching Media Converters

**10/100 Mbps (TX), 100 Mbps Fiber (FX)**  
- with Link Fault Pass-Thru (LFPT) Feature, Config Control  
- Chassis required

MODEL #	DESCRIPTION	DISTANCE-dB
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**IE-iMcV-MediaLinX, with SFP port(s), IE temperature range -40°C to +85°C**

856-18699	IE-iMcV-MediaLinX, TX/SFP (requires one IE-SFP/1250 module)	SFP Variable
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#### **iMcV-MediaLinX, TX/FX, 10/100 Mbps Copper to 100 Mbps Fiber**

856-15711	iMcV-MediaLinX, TX/FX-MM850-ST	2km - 14dB
856-15712	iMcV-MediaLinX, TX/FX-MM850-SC	2km - 14dB
856-15713	iMcV-MediaLinX, TX/FX-MM1300-ST	5km - 11dB
856-15714	iMcV-MediaLinX, TX/FX-MM1300-SC	5km - 11dB
856-15717	iMcV-MediaLinX, TX/FX-SM1310/PLUS-ST	40km - 19dB
856-15718	iMcV-MediaLinX, TX/FX-SM1310/PLUS-SC	40km - 19dB
856-15719	iMcV-MediaLinX, TX/FX-SM1310/LONG-ST	80km - 31dB
856-15720	iMcV-MediaLinX, TX/FX-SM1310/LONG-SC	80km - 31dB
856-15723	iMcV-MediaLinX, TX/FX-SM1550/LONG-SC	80km - 31dB

#### **iMcV-MediaLinX, TX/FX, Single-strand Fiber**

856-15731	iMcV-MediaLinX, TX/SSFx-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
856-15732	iMcV-MediaLinX, TX/SSFx-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
856-15733	iMcV-MediaLinX, TX/SSFx-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
856-15734	iMcV-MediaLinX, TX/SSFx-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
856-15735	iMcV-MediaLinX, TX/SSFx-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
856-15736	iMcV-MediaLinX, TX/SSFx-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

*iMcV-MediaLinX, CWDM fiber also available. Call for details.*

## iMcV-Giga-MediaLinX

### iMcV-Giga-MediaLinX Media Converters

**10/100/1000 Mbps (TX), 1.25 Gbps (SX/LX)**  
- with Link Fault Pass-Thru (LFPT) Feature, Config Control  
- Chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
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#### **iMcV-Giga-MediaLinX TX/LX**

856-11959	iMcV-Giga-MediaLinX, TX/SX-MM850-ST	220/550m-7.5dB
856-11950	iMcV-Giga-MediaLinX, TX/SX-MM850-SC	220/550m-7.5dB
856-11951	iMcV-Giga-MediaLinX, TX/LX-SM1310-SC	10km-10.5dB
856-11952	iMcV-Giga-MediaLinX, TX/LX-SM1310/PLUS-SC	40km - 21dB
856-11953	iMcV-Giga-MediaLinX, TX/LX-SM1550/LONG-SC	80km - 24dB
856-11958	iMcV-Giga-MediaLinX, TX/LX-SM1550/XLONG-SC	100km - 32dB

#### **iMcV-Giga-MediaLinX TX/SSLX, Single-strand Fiber**

856-11940	iMcV-Giga-MediaLinX, TX/SSLX-SM1310-SC (1310xmt/1550rcv)	10km - 12dB
856-11941	iMcV-Giga-MediaLinX, TX/SSLX-SM1550-SC (1550xmt/1310rcv)	10km - 12dB
856-11933	iMcV-Giga-MediaLinX, TX/SSBX-SM1310-SC (1310xmt/1490rcv)	10km - 12dB
856-11935	iMcV-Giga-MediaLinX, TX/SSBX-SM1490-SC (1490xmt/1310rcv)	10km - 12dB
856-11942	iMcV-Giga-MediaLinX, TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
856-11943	iMcV-Giga-MediaLinX, TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
856-11937	iMcV-Giga-MediaLinX, TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20dB
856-11939	iMcV-Giga-MediaLinX, TX/SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	30km - 20dB
856-11954	iMcV-Giga-MediaLinX, TX/SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	70km - 19dB
856-11955	iMcV-Giga-MediaLinX, TX/SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	70km - 19dB

#### **iMcV-Giga-MediaLinX TX/LX, with SFP**

856-15410	iMcV-Giga-MediaLinX, TX/LX/SFP (requires one IE-SFP/1250 module)	SFP Variable
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*iMcV-Giga-MediaLinX, CWDM fiber also available. Call for details.*

# FIBER-TO-FIBER MODE CONVERSION

## iMcV-S2MM

### iMcV-ModeConverter, Single-to-Multi-Mode Modules

10 Mbps Ethernet to 155 Mbps

- Protocol-Independent
- Chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<b>iMcV-S2MM/155, Singlemode-to-Multimode</b>		
850-14520	iMcV-S2MM/155, SM1310/PLUS-ST + MM1300-ST	40km -19dB + 5km -11dB
850-14530	iMcV-S2MM/155, SM1310/PLUS-SC + MM1300-SC	40km -19dB + 5km -11dB
850-14540	iMcV-S2MM/155, SM1310/LONG-ST + MM1300-ST	80km -31dB + 5km -11dB
850-14550	iMcV-S2MM/155, SM1310/LONG-SC + MM1300-SC	80km -31dB + 5km -11dB
850-14555	iMcV-S2MM/155, SM1550/LONG-SC + MM1300-SC	80km -31dB + 5km -11dB
850-14560	iMcV-S2MM/155, SM1310/PLUS-ST + MM850-ST	40km -19dB + 2km -14dB
850-14570	iMcV-S2MM/155, SM1310/PLUS-SC + MM850-SC	40km -19dB + 2km -14dB
850-14580	iMcV-S2MM/155, SM1310/LONG-ST + MM850-ST	80km -31dB + 2km -14dB
850-14590	iMcV-S2MM/155, SM1310/LONG-SC + MM850-SC	80km -31dB + 2km -14dB
850-14595	iMcV-S2MM/155, SM1550/LONG-SC + MM850-SC	80km -31dB + 2km -14dB

### iMcV-S2MM/155, Single-strand Fiber, Singlemode-to-Multimode

850-14532	iMcV-S2MM/155, SSFX-SM1310-SC (1310xmt/1550rcv) + MM1300-SC	20km -17dB + 5km -11dB
850-14533	iMcV-S2MM/155, SSFX-SM1550-SC (1550xmt/1310rcv) + MM1300-SC	20km -17dB + 5km -11dB
850-14535	iMcV-S2MM/155, SSFX-SM1310/PLUS-SC (1310xmt/1550rcv) + MM1300-SC	40km -26dB + 5km -11dB
850-14536	iMcV-S2MM/155, SSFX-SM1550/PLUS-SC (1550xmt/1310rcv) + MM1300-SC	40km -26dB + 5km -11dB

10 Mbps Ethernet to 155 Mbps to 1.25 Gbps Ethernet

- Protocol-Independent
- Chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<b>iMcV-S2MM/1250, Singlemode-to-Multimode</b>		
859-14799	iMcV-S2MM/1250, LX-SM1310-SC + SX-MM850-SC	10km -10.5dB + 220/550m -7.5dB
859-14800	iMcV-S2MM/1250, LX-SM1310/PLUS-SC + SX-MM850-SC	40km -21dB + 220/550m -7.5dB
859-14801	iMcV-S2MM/1250, LX-SM1550/LONG-SC + SX-MM850-SC	80km -24dB + 220/550m -7.5dB
<b>iMcV-S2MM/1250 SSLX, Single-strand Fiber, Singlemode-to-Multimode</b>		
859-14806	iMcV-S2MM/1250, SSLX-SM1310-SC (1310xmt/1550rcv) + SX-MM850-SC	15km -12dB + 220/550m -7.5dB
859-14807	iMcV-S2MM/1250, SSLX-SM1550-SC (1550xmt/1310rcv) + SX-MM850-SC	15km -12dB + 220/550m -7.5dB
859-14808	iMcV-S2MM/1250, SSLX-SM1310/PLUS-SC (1310xmt/1550rcv) + SX-MM850-SC	40km -20dB + 220/550m -7.5dB
859-14809	iMcV-S2MM/1250, SSLX-SM1550/PLUS-SC (1550xmt/1310rcv) + SX-MM850-SC	40km -20dB + 220/550m -7.5dB

## iMcV-S2SM

### iMcV-S2SM, Single-to-Single-Mode Modules

10 Mbps Ethernet to 155 Mbps

- Protocol-Independent
- Chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<b>iMcV-S2SM/155, Singlemode-to-Singlemode</b>		
850-14519	iMcV-S2SM/155, SM1310/PLUS-SC + SM1310/PLUS-SC	40km -19dB + 40km -19dB
850-14505	iMcV-S2SM/155, SM1310/LONG-SC + SM1310/LONG-SC	80km -31dB + 80km -31dB
850-14513	iMcV-S2SM/155, SM1550/LONG-SC + SM1310/PLUS-SC	80km -31dB + 220/550m -7.5dB
850-14514-LC	iMcV-S2SM/155, SM1550/LONG-SC + SM1310/LONG-LC	80km -31dB + 80km -31dB
<b>iMcV-S2SM/155, Single-strand Fiber, Singlemode-to-Multimode</b>		
850-14515	iMcV-S2SM/155, SSFX-SM1310-SC (1310xmt/1550rcv) + SM1310/PLUS-SC	20km -17dB + 40km -19dB
850-14516	iMcV-S2SM/155, SSFX-SM1550-SC (1550xmt/1310rcv) + SM1310/PLUS-SC	20km -17dB + 40km -19dB
850-14517	iMcV-S2SM/155, SSFX-SM1310/PLUS-SC (1310xmt/1550rcv) + SM1310/LONG-SC	40km -26dB + 80km -31dB
850-14518	iMcV-S2SM/155, SSFX-SM1550/PLUS-SC (1550xmt/1310rcv) + SM1310/LONG-SC	40km -26dB + 80km -31dB

1.25 Gbps Gigabit Ethernet

- Protocol-Independent
- chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<b>iMcV-S2SM/1250, Singlemode-to-Singlemode</b>		
859-14803	iMcV-S2SM/1250, LX-SM1310/PLUS-SC + LX-SM1310/PLUS-SC	40km -21dB + 40km -21dB
859-14804	iMcV-S2SM/1250, LX-SM1310/PLUS-SC + LX-SM1550/LONG-SC	40km -21dB + 80km -24dB
<b>iMcV-S2SM/1250 SSLX, Single-strand Fiber, Singlemode-to-Singlemode</b>		
859-14820	iMcV-S2SM/1250, SSLX-SM1310-SC (1310xmt/1550rcv) + LX-SM1310/PLUS-SC	15km -12dB + 40km -21dB
859-14821	iMcV-S2SM/1250, SSLX-SM1550-SC (1550xmt/1310rcv) + LX-SM1310/PLUS-SC	15km -12dB + 40km -21dB
859-14822	iMcV-S2SM/1250, SSLX-SM1310/PLUS-SC (1310xmt/1550rcv) + LX-SM1310/PLUS-SC	40km -20dB + 40km -21dB
859-14823	iMcV-S2SM/1250, SSLX-SM1550/PLUS-SC (1550xmt/1310rcv) + LX-SM1310/PLUS-SC	40km -20dB + 40km -21dB

## iMcV-M2MM

### iMcV-M2MM, Multi-to-Multi-Mode Modules

10 Mbps Ethernet to 155 Mbps

- Protocol-Independent
- Chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<b>iMcV-M2MM/155, Multimode-to-Multimode</b>		
850-14510	iMcV-M2MM/155, MM1300-ST + MM850-ST	5km -11dB + 2km -14dB
850-14511	iMcV-M2MM/155, MM1300-SC + MM850-SC	5km -11dB + 2km -14dB

## IE-ModeConverter

### IE-ModeConverter (SFP-to-SFP)

- Protocol-independent Fiber Mode Conversion
- Supports CWDM and standard fiber wavelengths

100 Mbps to 2.4 Gbps

- Standalone

MODEL #	DESCRIPTION	DISTANCE - dB
<i>IE-ModeConverter SFP/SFP, miniaturized mode converter</i> - requires two same-speed fiber SFP modules		
855-19619	IE-ModeConverter, SFP/SFP - includes AC power adapter - IE temperature range -10°C to +50°C	SFP Variable
854-19619	IE-ModeConverter Module, SFP/SFP - no AC power adapter, using DC power - IE temperature range -25°C to +85°C	SFP Variable

## IE-iMcV-ModeConverter

### IE-iMcV-ModeConverter, (SFP-to-SFP) Module

- Protocol-independent Fiber Mode Conversion
- Supports CWDM and standard fiber wavelengths

100 Mbps to 2.4 Gbps

- IE temperature range -40°C to +85°C (depending on chassis used)
- Chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<i>IE-iMcV-ModeConverter, SFP/SFP</i> - requires two same-speed fiber SFP modules		
850-19500	IE-iMcV-ModeConverter, SFP/SFP	SFP Variable

## iMcV-WDM

### iMcV-WDM

- Protocol-independent WDM Conversion Module
- Supports CWDM and standard fiber wavelengths

100 Mbps to 2.4 Gbps

- IE temperature range -40°C to +85°C (depending on chassis used)
- Chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<i>iMcV-WDM/2</i>		
849-14100	iMcV-WDM/2-SM1310-SC, - double-wide iMcV modules for modular chassis	Variable, based on speed
849-10100	WDM/2-SM1310-SC - stand-alone chassis	Variable, based on speed

## IE-iMcV-MuxDemux/4

### IE-iMcV-MuxDemux Modules (WDM)

- Protocol-independent Fiber Mode Conversion
- Supports CWDM and standard fiber wavelengths

4-Channel IE-MuxDemux Modules

- Chassis required
- IE temperature range -35°C to +70°C

MODEL #	DESCRIPTION	DISTANCE - dB
<i>IE-iMcV-MuxDemux/4</i>		
844-18147	IE-iMcV-MuxDemux/4 Module, 1470-1530nm-LC	Variable, based on speed
844-18155	IE-iMcV-MuxDemux/4 Module, 1550-1610nm-LC	Variable, based on speed

### ACCESSORY for IE-iMcV-Mux/Demux/4

MODEL #	DESCRIPTION
<i>Rackmount Bracket</i>	
895-39948	Rackmount bracket for MuxDemuxChassis, iMediaChassis/3

## iMcV-10G-Converter

### iMcV-10G-Converter Modules (XFP, SFP+)

- Supports CWDM and standard fiber wavelengths

100 Mbps to 10 Gbps

- Chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<i>iMcV-10G-Converter</i> - requires two same-speed xFP modules		
860-12100	iMcV-10G-Converter, XFP/XFP (requires two XFP modules)	XFP, variable
860-12102	iMcV-10G-Converter, SFP+/ SFP+ (requires two SFP+ modules)	SFP+, variable

# OPTICAL ACCESS FTTX (DEMARCATION)

## IE-MultiWay

**IE-MultiWay (2TX to 2SFP)  
Multi-Function Media/Mode Converter  
- Ethernet Managed Optical Demarcation**

10/100/1000 Mbps Switching Copper (TX) to  
100/1000 Mbps Multirate Fiber (SFP)

MODEL #	DESCRIPTION	DISTANCE -dB
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### IE-MultiWay

858-11121	IE-MultiWay, 2TX/2SFP -Includes AC power adapter -IE temperature range = -10 to +50°C using adapter	SFP Variable
854-11121	IE-MultiWay Module, 2TX/2SFP -No AC power adapter, -IE temperature range = -40 to +85°C using DC power	SFP Variable

### Accessories for IE-MultiWay

806-39753	IE-Power/5V Module (MeanWell, -20°C to +70°C) -AC power adapter (DIN-mounted) -IE temperature range = -20 to +70°C	
825-39951	Serial cable, mini jack to DB9 female	
895-39229	Wall mount bracket for IE-MediaChassis, MiniMc & IE-MultiWay/NetworkTap	

## IE-iMcV-MultiWay

**IE-iMcV MultiWay (2TX to 2SFP)  
Multi-Function Media/Mode Converter  
- Ethernet Managed Optical Demarcation**

10/100/1000 Mbps Switching Copper (TX)  
to 100/1000 Mbps Multirate Fiber (SFP)

MODEL #	DESCRIPTION	DISTANCE -dB
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### IE-iMcV-MultiWay

858-18121	IE-iMcV-MultiWay Module, 2TX/2SFP	SFP Variable
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### Accessories for IE-iMcV-MultiWay

825-39951	Serial Cable, MiniJack to DB9 (female)	
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## AccessEtherLinX

### AccessEtherLinX (Managed)

10/100 Mbps Copper (TX) to  
100 Mbps Fiber (FX) Fast Ethernet

MODEL #	DESCRIPTION	DISTANCE - dB
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### AccessEtherLinX, TX/4 + , 100 Mbps Uplink

852-13120	AccessEtherLinX, TX/4 + TX	100m
852-13121	AccessEtherLinX, TX/4 + FX-MM1300-ST	5km - 11dB
852-13122	AccessEtherLinX, TX/4 + FX-MM1300-SC	5km - 11dB
852-13123	AccessEtherLinX, TX/4 + FX-SM1310/PLUS-ST	40km - 19dB
852-13124	AccessEtherLinX, TX/4 + FX-SM1310/PLUS-SC	40km - 19dB
852-13125	AccessEtherLinX, TX/4 + FX-SM1310/LONG-ST	80km - 31dB
852-13126	AccessEtherLinX, TX/4 + FX-SM1310/LONG-SC	80km - 31dB
852-13127	AccessEtherLinX, TX/4 + FX-SM1550/LONG-SC	80km - 31dB
852-13130	AccessEtherLinX, TX/4 + FX-SM1550/XLONG-SC	100km - 38dB

### AccessEtherLinX TX/4 + , Single-strand Fiber Uplink

852-10133	AccessEtherLinX, TX/4 + SSFX-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
852-10134	AccessEtherLinX, TX/4 + SSFX-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
852-10135	AccessEtherLinX, TX/4 + SSFX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
852-10136	AccessEtherLinX, TX/4 + SSFX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
852-10137	AccessEtherLinX, TX/4 + SSFX-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
852-10138	AccessEtherLinX, TX/4 + SSFX-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

AccessEtherLinX, CWDM fiber also available. Call for details.

## Giga-AccessEtherLinX-II

### Giga-AccessEtherLinX-II (Managed)

10/100/1000 Mbps AutoNegotiating Copper (TX) to 1.25 Gbps Fiber

MODEL #	DESCRIPTION	DISTANCE - dB
<b>Giga-AccessEtherLinX-II TX/4+, 1.25 Gbps Uplink</b>		
852-10302	Giga-AccessEtherLinX-II, TX/4 + SFP (requires one SFP/1250 module)	SFP Variable
852-10303	Giga-AccessEtherLinX-II, TX/4 + SX-MM850-SC	220/550m-7.5dB
852-10304	Giga-AccessEtherLinX-II, TX/4 + LX-SM1310-SC	10km - 10.5dB
852-10305	Giga-AccessEtherLinX-II, TX/4 + LX-SM1310/PLUS-SC	40km - 21dB
852-10306	Giga-AccessEtherLinX-II, TX/4 + LX-SM1550/LONG-SC	80km - 24dB
852-10307	Giga-AccessEtherLinX-II, TX/4 + LX-SM1550/XLONG-SC	100km - 32dB
<b>Giga-AccessEtherLinX-II TX/4 +, Single-strand Fiber Uplink</b>		
852-10310	Giga-AccessEtherLinX-II, TX/4 + SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12dB
852-10311	Giga-AccessEtherLinX-II, TX/4 + SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12dB
852-10312	Giga-AccessEtherLinX-II, TX/4 + SSBX-SM1310-SC (1310xmt/1490rcv)	10km - 12dB
852-10313	Giga-AccessEtherLinX-II, TX/4 + SSBX-SM1490-SC (1490xmt/1310rcv)	10km - 12dB
852-10314	Giga-AccessEtherLinX-II, TX/4 + SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
852-10315	Giga-AccessEtherLinX-II, TX/4 + SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
852-10316	Giga-AccessEtherLinX-II, TX/4 + SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20dB
852-10317	Giga-AccessEtherLinX-II, TX/4 + SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	30km - 20dB
852-10318	Giga-AccessEtherLinX-II, TX/4 + SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	70km - 19dB
852-10319	Giga-AccessEtherLinX-II, TX/4 + SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	70km - 19dB

*Giga-AccessEtherLinX-II (AC), CWDM fiber also available. Call for details.*

## Giga-AccessEtherLinX-II (DC)

### Giga-AccessEtherLinX-II (DC power)

10/100/1000 Mbps AutoNegotiating Copper (TX) to 1.25 Gbps Fiber

MODEL #	DESCRIPTION	DISTANCE - dB
<b>Giga-AccessEtherLinX-II TX/4 + 1.25 Gbps Uplink</b>		
852-32302	Giga-AccessEtherLinX-II, TX/4 + SFP (requires SFP/1250 module) (DC power)	SFP Variable
852-32303	Giga-AccessEtherLinX-II, TX/4 + SX-MM850-SC (DC power)	220/550m-7.5dB
852-32304	Giga-AccessEtherLinX-II, TX/4 + LX-SM1310-SC (DC power)	10km - 10.5dB
852-32305	Giga-AccessEtherLinX-II, TX/4 + LX-SM1310/PLUS-SC (DC power)	40km - 21dB
852-32306	Giga-AccessEtherLinX-II, TX/4 + LX-SM1550/LONG-SC (DC power)	80km - 24dB
852-32307	Giga-AccessEtherLinX-II, TX/4 + LX-SM1550/XLONG-SC (DC power)	100km - 32dB
<b>Giga-AccessEtherLinX-II TX/4, Single-strand Fiber Uplink</b>		
852-32310	Giga-AccessEtherLinX-II, TX/4 + SSLX-SM1310-SC (DC power) (1310xmt/1550rcv)	15km - 12dB
852-32311	Giga-AccessEtherLinX-II, TX/4 + SSLX-SM1550-SC (DC power) (1550xmt/1310rcv)	15km - 12dB
852-32312	Giga-AccessEtherLinX-II, TX/4 + SSBX-SM1310-SC (DC power) (1310xmt/1490rcv)	10km - 12dB
852-32313	Giga-AccessEtherLinX-II, TX/4 + SSBX-SM1490-SC (DC power) (1490xmt/1310rcv)	10km - 12dB
852-32314	Giga-AccessEtherLinX-II, TX/4 + SSLX-SM1310/PLUS-SC (DC power) (1310xmt/1550rcv)	40km - 20dB
852-32315	Giga-AccessEtherLinX-II, TX/4 + SSLX-SM1550/PLUS-SC (DC power) (1550xmt/1310rcv)	40km - 20dB
852-32316	Giga-AccessEtherLinX-II, TX/4 + SSBX-SM1310/PLUS-SC (DC power) (1310xmt/1490rcv)	30km - 20dB
852-32317	Giga-AccessEtherLinX-II, TX/4 + SSBX-SM1490/PLUS-SC (DC power) (1490xmt/1310rcv)	30km - 20dB
852-32318	Giga-AccessEtherLinX-II, TX/4 + SSLX-SM1490/LONG-SC (DC power) (1490xmt/1550rcv)	70km - 19dB
852-32319	Giga-AccessEtherLinX-II, TX/4 + SSLX-SM1550/LONG-SC (DC power) (1550xmt/1490rcv)	70km - 19dB

*Giga-AccessEtherLinX-II (DC), CWDM fiber also available. Call for details.*

**iMcV-FiberLinX-II**

**iMcV-FiberLinX-II Modules (Managed)**

10/100 Mbps AutoNegotiating Copper (TX),  
100 Mbps Fiber (FX) Ethernet (MAN, CityNet)

- Chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<b>iMcV-FiberLinX-II, SFP port(s)</b>		
<i>- each SFP port requires SFP/155-ED module</i>		
856-14500	iMcV-FiberLinX-II, TX/SFP (requires one SFP/155-ED module)	SFP Variable
<b>iMcV-FiberLinX-II, TX/FX</b>		
856-14011	iMcV-FiberLinX-II, TX/FX-MM1300-ST	5km - 11dB
856-14012	iMcV-FiberLinX-II, TX/FX-MM1300-SC	5km - 11dB
856-14015	iMcV-FiberLinX-II, TX/FX-SM1310/PLUS-ST	40km - 19dB
856-14016	iMcV-FiberLinX-II, TX/FX-SM1310/PLUS-SC	40km - 19dB
856-14017	iMcV-FiberLinX-II, TX/FX-SM1310/LONG-ST	80km - 31dB
856-14018	iMcV-FiberLinX-II, TX/FX-SM1310/LONG-SC	80km - 31dB
856-14021	iMcV-FiberLinX-II, TX/FX-SM1550/LONG-SC	80km - 31dB
856-14022	iMcV-FiberLinX-II, TX/FX-SM1550/XLONG-SC	100km - 38dB
<b>iMcV-FiberLinX-II, Single-strand Fiber</b>		
856-14039	iMcV-FiberLinX-II, TX/SSFx-MM1310-SC (1310xmt/1550rcv)	2km - 20dB
856-14040	iMcV-FiberLinX-II, TX/SSFx-MM1550-SC (1550xmt/1310rcv)	2km - 20dB
856-14043	iMcV-FiberLinX-II, TX/SSFx-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
856-14044	iMcV-FiberLinX-II, TX/SSFx-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
856-14045	iMcV-FiberLinX-II, TX/SSFx-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
856-14046	iMcV-FiberLinX-II, TX/SSFx-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
856-14047	iMcV-FiberLinX-II, TX/SSFx-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
856-14048	iMcV-FiberLinX-II, TX/SSFx-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

*iMcV-FiberLinX-II, CWDM fiber also available. Call for details.*

**iMcV-Giga-FiberLinX-II**

**iMcV-Giga-FiberLinX-III Modules (Managed)**

10/100/1000 Mbps AutoNegotiating Copper (TX),  
1.25 Gbps (SX/LX) Gigabit Ethernet

- Chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<b>iMcV-Giga-FiberLinX-III, TX/SFP</b>		
<i>- each SFP port requires SFP/1250-ED GbE module</i>		
856-14201	iMcV-Giga-FiberLinX-III, TX/SFP	SFP Variable
<b>iMcV-Giga-FiberLinX-III</b>		
856-14205	iMcV-Giga-FiberLinX-III, TX/SX-MM850-SC	220/550m - 7.5dB
856-14206	iMcV-Giga-FiberLinX-III, TX/LX-SM1310-SC	10km - 10.5dB
856-14207	iMcV-Giga-FiberLinX-III, TX/LX-SM1310/PLUS-SC	40km - 21dB
856-14208	iMcV-Giga-FiberLinX-III, TX/LX-SM1550/LONG-SC	80km - 24dB
856-14209	iMcV-Giga-FiberLinX-III, TX/LX-SM1550/XLONG-SC	100km - 32dB
<b>iMcV-Giga-FiberLinX-III, Single-strand Fiber</b>		
856-14220	iMcV-Giga-FiberLinX-III, TX/SSLX-SM1310-SC (1310xmt/1550rcv)	15km - 12dB
856-14221	iMcV-Giga-FiberLinX-III, TX/SSLX-SM1550-SC (1550xmt/1310rcv)	15km - 12dB
856-14222	iMcV-Giga-FiberLinX-III, TX/SSBX-SM1310-SC (1310xmt/1490rcv)	10km - 12dB
856-14223	iMcV-Giga-FiberLinX-III, TX/SSBX-SM1490-SC (1490xmt/1310rcv)	10km - 12dB
856-14224	iMcV-Giga-FiberLinX-III, TX/SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
856-14225	iMcV-Giga-FiberLinX-III, TX/SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
856-14226	iMcV-Giga-FiberLinX-III, TX/SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	30km - 20dB
856-14227	iMcV-Giga-FiberLinX-III, TX/SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	30km - 20dB
856-14228	iMcV-Giga-FiberLinX-III, TX/SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	70km - 19dB
856-14229	iMcV-Giga-FiberLinX-III, TX/SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	70km - 19dB

## IE-MiniFiberLinX-II

### IE-MiniFiberLinX-II (IE (Industrial Equipment))

- extended temperature range

10/100 Mbps AutoNegotiating Copper (TX),  
100 Mbps Fiber (FX) Ethernet (MAN, CityNet)

- includes AC adapter, IE temperature range -10°C to 50°C

MODEL #	DESCRIPTION	DISTANCE - dB
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#### IE-MiniFiberLinX-II TP-TX/FX

856-19717	IE-MiniFiberLinX-II, TP-TX/FX-MM850-ST (-20°C to +70°C)	2km - 14dB
856-19718	IE-MiniFiberLinX-II, TP-TX/FX-MM850-SC (-20°C to +70°C)	2km - 14dB
856-19722	IE-MiniFiberLinX-II, TP-TX/FX-MM1300-ST	5km - 11dB
856-19723	IE-MiniFiberLinX-II, TP-TX/FX-MM1300-SC	5km - 11dB
856-19724	IE-MiniFiberLinX-II, TP-TX/FX-SM1310/PLUS-ST	30km - 19dB
856-19725	IE-MiniFiberLinX-II, TP-TX/FX-SM1310/PLUS-SC	30km - 19dB
856-19726	IE-MiniFiberLinX-II, TP-TX/FX-SM1310/LONG-ST	80km - 31dB
856-19727	IE-MiniFiberLinX-II, TP-TX/FX-SM1310/LONG-SC	80km - 31dB
856-19730	IE-MiniFiberLinX-II, TP-TX/FX-SM1550/LONG-SC	80km - 31dB
856-19728	IE-MiniFiberLinX-II, TP-TX/FX-SM1550/XLONG-SC	100km - 38dB

#### IE-MiniFiberLinX-II TP-TX/FX, Single-strand Fiber

856-19750	IE-MiniFiberLinX-II, TP-TX/SSFx-MM1310-SC (1310xmt/1550rcv)	2km - 20dB
856-19751	IE-MiniFiberLinX-II, TP-TX/SSFx-MM1550-SC (1550xmt/1310rcv)	2km - 20dB
856-19752	IE-MiniFiberLinX-II, TP-TX/SSFx-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
856-19753	IE-MiniFiberLinX-II, TP-TX/SSFx-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
856-19754	IE-MiniFiberLinX-II, TP-TX/SSFx-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
856-19755	IE-MiniFiberLinX-II, TP-TX/SSFx-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
856-19756	IE-MiniFiberLinX-II, TP-TX/SSFx-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
856-19757	IE-MiniFiberLinX-II, TP-TX/SSFx-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

#### IE-MiniFiberLinX-II TP-TX/FX, CWDM Fiber

856-19658	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1270-SC	80km - 33dB
856-19659	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1290-SC	80km - 33dB
856-19660	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1310-SC	80km - 33dB
856-19661	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1330-SC	80km - 33dB
856-19662	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1350-SC	80km - 33dB
856-19663	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1370-SC	80km - 33dB
856-19664	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1390-SC	80km - 33dB
856-19665	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1410-SC	80km - 33dB
856-19666	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1430-SC	80km - 33dB
856-19667	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1450-SC	80km - 33dB
856-19668	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1470-SC	80km - 33dB
856-19669	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1490-SC	80km - 33dB
856-19670	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1510-SC	80km - 33dB
856-19671	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1530-SC	80km - 33dB
856-19672	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1550-SC	80km - 33dB
856-19673	IE-MiniFiberLinX-II, TP-TX/FX-CWDM-SM1570-SC	80km - 33dB

## IE-MiniFiberLinX-II - continued

### IE-MiniFiberLinX-II Module

- no AC power adapter included

10/100 Mbps AutoNegotiating Copper (TX),  
100 Mbps Fiber (FX) Ethernet (MAN, CityNet)

- not using AC power adapter, using DC power, IE temp range -25°C to +75°C

MODEL #	DESCRIPTION	DISTANCE - dB
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#### IE-MiniFiberLinX-II Module, TP-TX/FX

856-19741	IE-MiniFiberLinX-II Module, TP-TX/FX-MM850-SC (-20°C to +70°C) (w/o AC adapter)	2km - 14dB
856-19732	IE-MiniFiberLinX-II Module, TP-TX/FX-MM1300-ST (no AC adapter)	5km - 11dB
856-19734	IE-MiniFiberLinX-II Module, TP-TX/FX-SM1310/PLUS-ST (no AC adapter)	30km - 19dB
856-19735	IE-MiniFiberLinX-II Module, TP-TX/FX-SM1310/PLUS-SC (no AC adapter)	30km - 19dB

#### IE-MiniFiberLinX-II Module, Single-strand Fiber

856-19762	IE-MiniFiberLinX-II Module, TP-TX/SSFx-SM1310-SC (1310xmt/1550rcv) (w/o AC adapter)	20km - 17dB
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### IE-MiniFiberLinX-II/Telco (Telco spec power)

10/100 Mbps AutoNegotiating Copper (TX),  
100 Mbps Fiber (FX) Ethernet (MAN, CityNet)

-includes AC adapter, IE temperature range -10°C to 50°C

MODEL #	DESCRIPTION	DISTANCE - dB
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#### IE-MiniFiberLinX-II TP-TX/FX

856-17620	IE-MiniFiberLinX-II/Telco, TP-TX/FX-MM850-ST (-20 to +70°C)	2km - 14dB
856-17621	IE-MiniFiberLinX-II/Telco, TP-TX/FX-MM850-SC (-20 to +70°C)	2km - 14dB
856-17633	IE-MiniFiberLinX-II/Telco, TP-TX/FX-MM1300-ST	5km - 11dB
856-17623	IE-MiniFiberLinX-II/Telco, TP-TX/FX-MM1300-SC	5km - 11dB
856-17626	IE-MiniFiberLinX-II/Telco, TP-TX/FX-SM1310/PLUS-ST	30km - 19dB
856-17627	IE-MiniFiberLinX-II/Telco, TP-TX/FX-SM1310/PLUS-SC	30km - 19dB
856-17629	IE-MiniFiberLinX-II/Telco, TP-TX/FX-SM1310/LONG-ST	80km - 31dB
856-17629	IE-MiniFiberLinX-II/Telco, TP-TX/FX-SM1310/LONG-SC	80km - 31dB
856-17630	IE-MiniFiberLinX-II/Telco, TP-TX/FX-SM1310/XLONG-SC	100km - 38dB
856-17631	IE-MiniFiberLinX-II/Telco, TP-TX/FX-SM1550/LONG-SC	80km - 31dB
856-17632	IE-MiniFiberLinX-II/Telco, TP-TX/FX-SM1550/XLONG-SC	100km - 38dB

#### IE-MiniFiberLinX-II TP-TX/FX, Single-strand Fiber

856-17640	IE-MiniFiberLinX-II/Telco, TP-TX/SSFx-MM1310-SC (1310xmt/1550rcv)	2km - 20dB
856-17641	IE-MiniFiberLinX-II/Telco, TP-TX/SSFx-MM1550-SC (1550xmt/1310rcv)	2km - 20dB
856-17642	IE-MiniFiberLinX-II/Telco, TP-TX/SSFx-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
856-17643	IE-MiniFiberLinX-II/Telco, TP-TX/SSFx-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
856-17644	IE-MiniFiberLinX-II/Telco, TP-TX/SSFx-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
856-17645	IE-MiniFiberLinX-II/Telco, TP-TX/SSFx-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
856-17646	IE-MiniFiberLinX-II/Telco, TP-TX/SSFx-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
856-17647	IE-MiniFiberLinX-II/Telco, TP-TX/SSFx-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

*iMcV-FiberLinX-II/Telco, CWDM fiber also available. Call for details.*

**MODELS | SKU & DESCRIPTION**  
**OPTICAL ACCESS FTTX - continued**

**IE-MiniFiberLinX-II (Telco/LastGasp)**

**IE-MiniFiberLinX-II/Telco-LastGasp**  
 - Telco spec power and LastGasp capability

10/100 Mbps AutoNegotiating Copper (TX),  
 100 Mbps Fiber (FX) Ethernet (MAN, CityNet)  
 - includes AC adapter; IE temperature range - refer to data sheet

MODEL #	DESCRIPTION	DISTANCE-dB
<b>IE-MiniFiberLinX-II TP-TX/FX</b>		
856-17720	IE-MiniFiberLinX-II/LastGasp, TP-TX/FX-MM850-ST	2km - 14dB
856-17721	IE-MiniFiberLinX-II/LastGasp, TP-TX/FX-MM850-SC	2km - 14dB
856-17722	IE-MiniFiberLinX-II/LastGasp, TP-TX/FX-MM1300-ST	5km - 11dB
856-17723	IE-MiniFiberLinX-II/LastGasp, TP-TX/FX-MM1300-SC	5km - 11dB
856-17726	IE-MiniFiberLinX-II/LastGasp, TP-TX/FX-SM1310/PLUS-ST	30km - 19dB
856-17727	IE-MiniFiberLinX-II/LastGasp, TP-TX/FX-SM1310/PLUS-SC	30km - 19dB
856-17728	IE-MiniFiberLinX-II/LastGasp, TP-TX/FX-SM1310/LONG-ST	80km - 31dB
856-17729	IE-MiniFiberLinX-II/LastGasp, TP-TX/FX-SM1310/LONG-SC	80km - 31dB
856-17730	IE-MiniFiberLinX-II/LastGasp, TP-TX/FX-SM1310/XLONG-SC	100km-38dB
856-17731	IE-MiniFiberLinX-II/LastGasp, TP-TX/FX-SM1550/LONG-SC	80km - 31dB
856-17732	IE-MiniFiberLinX-II/LastGasp, TP-TX/FX-SM1550/XLONG-SC	100km-38dB

**IE-MiniFiberLinX-II TP-TX/FX, Single-strand Fiber**

856-17740	IE-MiniFiberLinX-II/LastGasp, TP-TX/SSFX-MM1310-SC (1310xmt/1550rcv)	2km - 20dB
856-17741	IE-MiniFiberLinX-II/LastGasp, TP-TX/SSFX-MM1550-SC (1550xmt/1310rcv)	2km - 20dB
856-17742	IE-MiniFiberLinX-II/LastGasp, TP-TX/SSFX-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
856-17743	IE-MiniFiberLinX-II/LastGasp, TP-TX/SSFX-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
856-17744	IE-MiniFiberLinX-II/LastGasp, TP-TX/SSFX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
856-17745	IE-MiniFiberLinX-II/LastGasp, TP-TX/SSFX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
856-17746	IE-MiniFiberLinX-II/LastGasp, TP-TX/SSFX-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
856-17747	IE-MiniFiberLinX-II/LastGasp, TP-TX/SSFX-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB

*iMcV-FiberLinX-II/LastGasp, CWDM fiber also available. Call for details.*

**ACCESSORIES - IE-MiniFiberLinX-II series**

- supports all temperatures and speed types

MODEL #	DESCRIPTION
806-39720	AC Power Adapter for MiniMc products (10 Watt, -10°C to +50°C)
806-39753	IE-Power/5V Module (MeanWell, -20°C to +70°C)
806-39628	USB Power Cable for MiniMc only (36")
806-39629	USB Power Cable for MiniMc only (12")
806-39638	Double-USB Power Cable for ALL MiniMc models (36")
806-39650	Barrel-Connector Power Cable for IE-Power Modules (12")
806-39105	DIN-mount Clip (not included with DIN-mount products)

**MODELS | SKU & DESCRIPTION**  
**TELCO (TDM)**

**IE-iMcV-T1/E1/J1-LineTerm**

**Line Terminating Modules with Config Control**  
 - Media (T1/E1/J1) Conversion/Extension

1.544 Mbps (T1/J1) or 2.048 Mbps (E1)

- IE temperature range -20°C to +70°C  
 - Chassis required

MODEL #	DESCRIPTION	DISTANCE-dB
<b>I-iMcV-T1/E1/J1-LineTerm</b>		
850-18100	IE-iMcV-T1/E1/J1-LineTerm, TP/SFP requires SFP/155 module)	SFP Variable
850-18101	IE-iMcV-T1/E1/J1-LineTerm, TP/Fiber-MM850-ST	2km-14dB
850-18102	IE-iMcV-T1/E1/J1-LineTerm, TP/Fiber-MM850-SC	2km-14dB
850-18103	IE-iMcV-T1/E1/J1-LineTerm, TP/Fiber-MM1300-ST	5km-11dB
850-18104	IE-iMcV-T1/E1/J1-LineTerm, TP/Fiber-MM1300-SC	5km-11dB
850-18113	IE-iMcV-T1/E1/J1-LineTerm, TP/Fiber-SM1310-ST	10km-19dB
850-18115	IE-iMcV-T1/E1/J1-LineTerm, TP/Fiber-SM1310-SC	10km-19dB
850-18105	IE-iMcV-T1/E1/J1-LineTerm, TP/Fiber-SM1310/PLUS-ST	40km-19dB
850-18106	IE-iMcV-T1/E1/J1-LineTerm, TP/Fiber-SM1310/PLUS-SC	40km-19dB
850-18107	IE-iMcV-T1/E1/J1-LineTerm, TP/Fiber-SM1310/LONG-ST	80km-31dB
850-18108	IE-iMcV-T1/E1/J1-LineTerm, TP/Fiber-SM1310/LONG-SC	80km-31dB
850-18109	IE-iMcV-T1/E1/J1-LineTerm, TP/Fiber-SM1310/XLONG-SC	100km-38dB
850-18110	IE-iMcV-T1/E1/J1-LineTerm, TP/Fiber-SM1550/LONG-ST	80km-31dB
850-18111	IE-iMcV-T1/E1/J1-LineTerm, TP/Fiber-SM1550/LONG-SC	80km-31dB
850-18112	IE-iMcV-T1/E1/J1-LineTerm, TP/Fiber-SM1550/XLONG-SC	100km-38dB
<b>IE-iMcV-T1/E1/J1-LineTerm, Single-strand Fiber</b>		
850-18120	IE-iMcV-T1/E1/J1-LineTerm, TP/SSFiber-MM1310-SC (1310xmt/1550rcv)	2km-20dB
850-18121	IE-iMcV-T1/E1/J1-LineTerm, TP/SSFiber-MM1550-SC (1550xmt/1310rcv)	2km-20dB
850-18122	IE-iMcV-T1/E1/J1-LineTerm, TP/SSFiber-SM1310-SC (1310xmt/1550rcv)	20km-17dB
850-18123	IE-iMcV-T1/E1/J1-LineTerm, TP/SSFiber-SM1550-SC (1550xmt/1310rcv)	20km-17dB
850-18124	IE-iMcV-T1/E1/J1-LineTerm, TP/SSFiber-SM1310/PLUS-SC (1310xmt/1550rcv)	40km-26dB
850-18125	IE-iMcV-T1/E1/J1-LineTerm, TP/SSFiber-SM1550/PLUS-SC (1550xmt/1310rcv)	40km-26dB
850-18126	IE-iMcV-T1/E1/J1-LineTerm, TP/SSFiber-SM1310/LONG-SC (1310xmt/1550rcv)	60km-31dB
850-18127	IE-iMcV-T1/E1/J1-LineTerm, TP/SSFiber-SM1550/LONG-SC (1550xmt/1310rcv)	60km-31dB

*iMcV-T1/E1/J1-LineTerm, CWDM fiber also available. Call for details.*

## IE-iMcV-E1-Mux/4

### E1-Mux/4 Module (double-wide) - TDM (E1) Multiplexer

2.048 Mbps (E1), 100 Mbps (FX) Fiber

- IE temperature range 0°C to +70°C
- Chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<b>IE-iMcV-E1-Mux/4+</b>		
857-18111	IE-iMcV-E1-Mux/4+ Ethernet, SFP (requires one or two SFP/155 Modules)	SFP Variable

## IE-iMcV-T1-Mux/4

### T1-Mux/4 Module (double-wide) - TDM (T1) Multiplexer

1.544 Mbps (T1), 100 Mbps Ethernet (FX) Fiber

- IE temperature range 0°C to +70°C
- Chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<b>IE-iMcV-T1-Mux/4+</b>		
857-18110	IE-iMcV-T1-Mux/4+ Ethernet, SFP (requires SFP/155 Module)	SFP Variable

## IE-iMcV-VDSL2-LANextender

### IE-iMcV-VDSL2-LANextender Module

- VDSL2 10Base-s, Ethernet over VDSL Conversion

Converts 10/100 Mbps to VDSL

- IE temperature range -40°C to +85°C
- Chassis required

MODEL #	DESCRIPTION	DISTANCE - dB
<b>IE-iMcV-VDSL2-LANextender</b>		
851-18200	IE-iMcV-VDSL2-LANextender	200m - 2km

## iMcV-DS3/E3/STS-LineTerm

### DS3/E3/STS Line Terminating Modules - Media (DS3/E3/STS) Conversion/Extension

45 Mbps (DS3), 34 Mbps (E3), 52 Mbps (STS-1)

- Chassis required

MODEL #	DESCRIPTION	DISTANCE -dB
<b>iMcV-DS3/E3/STS-LineTerm, BNC/FX</b>		
850-14438	iMcV-DS3/E3/STS-LineTerm, BNC/FX-MM850-ST	2km - 14dB
850-14439	iMcV-DS3/E3/STS-LineTerm, BNC/FX-MM850-SC	2km - 14dB
850-14400	iMcV-DS3/E3/STS-LineTerm, BNC/FX-MM1300-ST	5km - 11dB
850-14401	iMcV-DS3/E3/STS-LineTerm, BNC/FX-MM1300-SC	5km - 11dB
850-14402	iMcV-DS3/E3/STS-LineTerm, BNC/FX-SM1310/PLUS-ST	40km - 19dB
850-14403	iMcV-DS3/E3/STS-LineTerm, BNC/FX-SM1310/PLUS-SC	40km - 19dB
850-14404	iMcV-DS3/E3/STS-LineTerm, BNC/FX-SM1310/LONG-ST	80km - 31dB
850-14405	iMcV-DS3/E3/STS-LineTerm, BNC/FX-SM1310/LONG-SC	80km - 31dB
850-14406	iMcV-DS3/E3/STS-LineTerm, BNC/FX-SM1550/LONG-SC	80km - 31dB
<b>iMcV-DS3/E3/STS-LineTerm, Single-strand Fiber</b>		
850-14410	iMcV-DS3/E3/STS-LineTerm, BNC/SSFx-SM1310-SC (1310xmt/1550rcv)	20km - 17dB
850-14411	iMcV-DS3/E3/STS-LineTerm, BNC/SSFx-SM1550-SC (1550xmt/1310rcv)	20km - 17dB
850-14412	iMcV-DS3/E3/STS-LineTerm, BNC/SSFx-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 26dB
850-14413	iMcV-DS3/E3/STS-LineTerm, BNC/SSFx-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 26dB
850-14414	iMcV-DS3/E3/STS-LineTerm, BNC/SSFx-SM1310/LONG-SC (1310xmt/1550rcv)	60km - 31dB
850-14415	iMcV-DS3/E3/STS-LineTerm, BNC/SSFx-SM1550/LONG-SC (1550xmt/1310rcv)	60km - 31dB
<b>iMcV-DS3/E3/STS-LineTerm, CWDM Fiber</b>		
850-14420	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1270-SC	80km - 33dB
850-14421	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1290-SC	80km - 33dB
850-14422	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1310-SC	80km - 33dB
850-14423	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1330-SC	80km - 33dB
850-14424	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1350-SC	80km - 33dB
850-14425	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1370-SC	80km - 33dB
850-14426	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1390-SC	80km - 33dB
850-14427	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1410-SC	80km - 33dB
850-14428	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1430-SC	80km - 33dB
850-14429	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1450-SC	80km - 33dB
850-14430	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1470-SC	80km - 33dB
850-14431	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1490-SC	80km - 33dB
850-14432	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1510-SC	80km - 33dB
850-14433	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1530-SC	80km - 33dB
850-14434	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1550-SC	80km - 33dB
850-14435	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1570-SC	80km - 33dB
850-14436	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1590-SC	80km - 33dB
850-14437	iMcV-DS3/E3/STS-LineTerm, BNC/FX-CWDM-SM1610-SC	80km - 33dB

# MODELS | SKU & DESCRIPTION

## MEDIACHASSIS & ACCESSORIES

### Chassis Requiring iMcV Modules:

#### iMediaChassis (Modular SNMP)

MODEL #	DESCRIPTION
<b>iMediaChassis/20 /6 /3</b>	
605-10144-2AC	iMediaChassis/20-2AC (20-slot, dual AC input, two AC power modules)
605-10145-2DC	iMediaChassis/20-2DC (20-slot, dual DC input, two DC power modules)
850-10953-AC	iMediaChassis/6-AC (6-slot, one AC power module module)
850-10953-2AC	iMediaChassis/6-2AC (6-slot, two AC power modules)
850-10953-DC	iMediaChassis/6-DC (6-slot, one DC power module)
850-10953-2DC	iMediaChassis/6-2DC (6-slot, two DC power modules)
850-10949-AC	iMediaChassis/3-AC (3-slot, one AC fixed power module)
850-10949-2AC	iMediaChassis/3-2AC (3-slot, two AC fixed power modules)
850-10949-DC	iMediaChassis/3-DC (3-slot, one DC fixed power module)
850-10949-2DC	iMediaChassis/3-2DC (3-slot, two DC fixed power modules)
850-10949-ACDC	iMediaChassis/3-ACDC (3-slot, one AC, one DC fixed power module)
<b>iMediaChassis - SNMP Management</b>	
850-39950	iMediaChassis SNMP Management Module
825-39950	Serial Cable, DB9 (male) to DB9 (female)
<b>Backup/Spares</b>	
806-39125-AC	PS/125-AC Module, for iMediaChassis/6-AC (125 watt, 100-240 VAC)
806-39125-DC	PS/125-DC Module, for iMediaChassis/6-DC (125 watt, -48 VDC)
605-10144-AC	AC Power Supply for 605-10144-2AC
605-10144-DC	DC Power Supply for 605-10145-2DC

#### MediaChassis (Unmanaged)

MODEL #	DESCRIPTION
<b>iMediaChassis/1-AC, 2-AC</b>	
- internal 100-240V AC Power Supply	
850-13100	MediaChassis/1-AC (1-slot)
850-13101	MediaChassis/2-AC (2-slot)

#### IE-MediaChassis (Industrial, Unmanaged)

MODEL #	DESCRIPTION
<b>External 100-240V AC to DC Power Adapter &amp; 7-50V DC Terminal Block</b>	
850-33100	IE-MediaChassis/1 (IE temp range 0 to +50°C, EXTERNAL AC power adapter)
<b>Internal 100-240V AC to DC Power Supply</b>	
850-13106	IE-MediaChassis/2-AC (IE temp range -20°C to +70°C, internal AC power)
<b>Internal 48V DC Power Supply</b>	
850-32105	IE-MediaChassis/1-DC (IE temp range -35°C to +80°C, internal DC power)
850-32106	IE-MediaChassis/2-DC (IE temp range -35°C to +80°C, internal DC power)

#### Chassis Accessories

MODEL #	DESCRIPTION
895-39226	Rackmount bracket for McBasic, MediaChassis, AccessEtherLinX
895-39227	Wallmount brackets for McBasic, MediaChassis, AccessEtherLinX
895-39228	Rackmount shelf for 1 to 3 McBasic, MediaChassis, AccessEtherLinX
895-39229	Wallmount bracket for IE-MediaChassis, MiniMc & IE-MultiWay/NetworkTap
895-39949	Rackmount shelf for iMediaChassis/3, McBasic, MediaChassis, AccessEtherLinX

### Chassis Requiring MiniMc Modules:

#### IE-PowerTray/18 (Unmanaged)

MODEL #	DESCRIPTION
<b>Fixed Power Supply</b>	
- IE temperature range -20°C to +70°C	
850-13086	IE-PowerTray/18-AC (18-slot, one AC fixed power)

### Chassis Requiring Mc Modules:

#### MediaConverter (Unmanaged)

MODEL #	DESCRIPTION
<b>100-240V AC Power</b>	
<b>Table-top chassis (fixed AC power supply)</b>	
851-10901	MediaConverter/1
851-10904	MediaConverter/4
851-10908	MediaConverter/8
<b>Rack-mount chassis (modular AC power supply)</b>	
851-10912	MediaConverter/12x (1 U tall)
<b>AC power supply modules</b>	
806-39040	PS/40x-AC (40 watt, 100-240 VAC)

### Chassis for MuxDemux Modules:

#### IE-Mux/DemuxChassis

MODEL #	DESCRIPTION
<b>Unpowered</b>	
<b>Table-top chassis (unpowered)</b>	
850-36102	IE-MuxDemuxChassis/2 (for 2 IE-iMcV-MuxDemux/4 Modules, 1 U tall)

#### Cables & Adapters

MODEL #	DESCRIPTION
825-39950	Serial Cable, DB9 (male) to DB9 (female)
825-39500	Adapter, RJ-45 to DB9 (female)

# SMALL FORM PLUGGABLE “SFP” MODULES

## SFP Copper (Twisted Pair)

**Copper (Twisted Pair) Modules**  
- temperature range 0°C to +85°C

MODEL #	DESCRIPTION	DISTANCE - dB
<b>10/100/1000 Mbps Multi-rate Ethernet</b>		
808-39001	SFP/10-1250, TX	100m
<b>1000 Mbps Ethernet</b>		
808-39010	SFP/1250, TX	100m

## IE-SFP/155-ED Fiber (MSA Compliant)

**100 to 155 Mbps (OC-3) Modules**  
- IE temperature ranges

**100 Mbps Fast Ethernet**  
- with extended diagnostics - ED/DDMI

MODEL #	DESCRIPTION	DISTANCE - dB
<b>IE-SFP/155-ED</b> - IE extended temperature range -40°C to +85°C		
808-38101	IE-SFP/155-ED, MM850-LC	2km - 14.5dB
808-38102	IE-SFP/155-ED, MM1300-LC	2km - 13dB
808-38103	IE-SFP/155-ED, SM1310-LC	20km - 21dB
808-38104	IE-SFP/155-ED, SM1310/PLUS-LC	40km - 31dB
808-38105	IE-SFP/155-ED, SM1550/LONG-LC	80km - 31dB
<b>IE-SFP/155-ED, Single-strand Fiber</b> - IE extended temperature range -40°C to +85°C		
808-38521	IE-SFP/155-ED, SSFX-SM1310-LC (1310xmt/1550rcv)	20km - 15dB
808-38522	IE-SFP/155-ED, SSFX-SM1550-LC (1550xmt/1310rcv)	20km - 15dB
808-38523	IE-SFP/155-ED, SSFX-SM1310/PLUS-LC (1310xmt/1550rcv)	40km - 29dB
808-38524	IE-SFP/155-ED, SSFX-SM1550/PLUS-LC (1550xmt/1310rcv)	40km - 29dB
808-38519	IE-SFP/155-ED, SSFX-SM1310/PLUS-LC (1310xmt/1550rcv)	40km - 26dB
808-38520	IE-SFP/155-ED, SSFX-SM1550/PLUS-LC (1550xmt/1310rcv)	40km - 26dB
808-38529	IE-SFP/155-ED, SSFX-SM1310/LONG-LC (1310xmt/1550rcv)	60km - 29dB
808-38530	IE-SFP/155-ED, SSFX-SM1550/LONG-LC (1550xmt/1310rcv)	60km - 29dB
808-38527	IE-SFP/155-ED, SSFX-SM1490/XLONG-LC (1490xmt/1550rcv)	80km - 32dB
808-38528	IE-SFP/155-ED, SSFX-SM1550/XLONG-LC (1550xmt/1490rcv)	80km - 32dB
<b>IE-SFP/155-ED, CWDM Fiber</b> - IE temperature range 0°C to +70°C		
808-38141	IE-SFP/155-ED, CWDM-SM1270-LC	80km - 29dB
808-38142	IE-SFP/155-ED, CWDM-SM1290-LC	80km - 29dB
808-38143	IE-SFP/155-ED, CWDM-SM1310-LC	80km - 29dB
808-38144	IE-SFP/155-ED, CWDM-SM1330-LC	80km - 29dB
808-38145	IE-SFP/155-ED, CWDM-SM1350-LC	80km - 29dB
808-38146	IE-SFP/155-ED, CWDM-SM1370-LC	80km - 29dB
808-38147	IE-SFP/155-ED, CWDM-SM1390-LC	80km - 29dB
808-38148	IE-SFP/155-ED, CWDM-SM1410-LC	80km - 29dB
808-38149	IE-SFP/155-ED, CWDM-SM1430-LC	80km - 29dB
808-38150	IE-SFP/155-ED, CWDM-SM1450-LC	80km - 29dB
808-38151	IE-SFP/155-ED, CWDM-SM1470-LC	80km - 29dB
808-38152	IE-SFP/155-ED, CWDM-SM1490-LC	80km - 29dB
808-38153	IE-SFP/155-ED, CWDM-SM1510-LC	80km - 29dB
808-38154	IE-SFP/155-ED, CWDM-SM1530-LC	80km - 29dB
808-38155	IE-SFP/155-ED, CWDM-SM1550-LC	80km - 29dB
808-38156	IE-SFP/155-ED, CWDM-SM1570-LC	80km - 29dB
808-38157	IE-SFP/155-ED, CWDM-SM1590-LC	80km - 29dB
808-38158	IE-SFP/155-ED, CWDM-SM1610-LC	80km - 29dB

## IE-SFP/1250-ED

**1250 Mbps/1.25 Gbps (OC-24) Modules**  
- IE extended temperature range

**1.25 Gbps Gigabit Ethernet (GbE)**  
- with extended diagnostics - ED/DDMI

MODEL #	DESCRIPTION	DISTANCE - dB
<b>IE-SFP/1250-ED</b> - IE extended temperature range -40°C to +85°C		
808-38201	IE-SFP/1250-ED, MM850-LC	220/550m - 7.5dB
808-38200	IE-SFP/1250-ED, SM1310-LC	20km - 15dB
808-38203	IE-SFP/1250-ED, SM1310/PLUS-LC	30km - 17dB
808-38204	IE-SFP/1250-ED, SM1550/LONG-LC	40km - 18dB
808-38205	IE-SFP/1250-ED, SM1550/XLONG-LC	70km - 21dB
808-38208	IE-SFP/1250-ED, SM1550/XLONG-LC (IE extended temperature -20°C to +85°C)	120km - 31dB
<b>IE-SFP/1250-ED, Single-strand Fiber</b> - IE extended temperature range -40°C to +85°C		
808-38721	IE-SFP/1250-ED, SSLX-SM1310-LC (1310xmt/1550rcv)	20km - 15dB
808-38722	IE-SFP/1250-ED, SSLX-SM1550-LC (1550xmt/1310rcv)	20km - 15dB
808-38727	IE-SFP/1250-ED, SSBX-SM1310-LC (1310xmt/1490rcv)	10km - 12.5dB
808-38728	IE-SFP/1250-ED, SSBX-SM1490-LC (1490xmt/1310rcv)	10km - 12.5dB
808-38723	IE-SFP/1250-ED, SSLX-SM1310/PLUS-LC (1310xmt/1550rcv)	40km - 20dB
808-38724	IE-SFP/1250-ED, SSLX-SM1550/PLUS-LC (1550xmt/1310rcv)	40km - 20dB
808-38729	IE-SFP/1250-ED, SSBX-SM1310/PLUS-LC (1310xmt/1490rcv)	40km - 20dB
808-38730	IE-SFP/1250-ED, SSBX-SM1490/PLUS-LC (1490xmt/1310rcv)	40km - 20dB
808-38725	IE-SFP/1250-ED, SSLX-SM1490/LONG-LC (1490xmt/1550rcv)	70km - 21dB
808-38726	IE-SFP/1250-ED, SSLX-SM1550/LONG-LC (1550xmt/1490rcv)	70km - 21dB
<b>IE-SFP/1250-ED, Single-strand Fiber, SC connectors</b> - IE extended temperature range -40°C to +85°C		
808-38221	IE-SFP/1250-ED, SSLX-SM1310-SC (1310xmt/1550rcv)	20km - 15dB
808-38222	IE-SFP/1250-ED, SSLX-SM1550-SC (1550xmt/1310rcv)	20km - 15dB
808-38227	IE-SFP/1250-ED, SSBX-SM1310-SC (1310xmt/1490rcv)	10km - 12.5dB
808-38228	IE-SFP/1250-ED, SSBX-SM1490-SC (1490xmt/1310rcv)	10km - 12.5dB
808-38223	IE-SFP/1250-ED, SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)	40km - 20dB
808-38224	IE-SFP/1250-ED, SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)	40km - 20dB
808-38229	IE-SFP/1250-ED, SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)	40km - 20dB
808-38230	IE-SFP/1250-ED, SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)	40km - 20dB
808-38289	IE-SFP/1250-ED, SSLX-SM1490/LONG-SC (1490xmt/1550rcv)	70km - 19dB
808-38290	IE-SFP/1250-ED, SSLX-SM1550/LONG-SC (1550xmt/1490rcv)	70km - 19dB
<b>IE-SFP/1250-ED, CWDM Fiber</b> - IE extended temperature range -20°C to +85°C		
808-38241	IE-SFP/1250-ED, CWDM-SM1270-LC	40km - 22dB
808-38242	IE-SFP/1250-ED, CWDM-SM1290-LC	40km - 22dB
808-38243	IE-SFP/1250-ED, CWDM-SM1310-LC	40km - 22dB
808-38244	IE-SFP/1250-ED, CWDM-SM1330-LC	40km - 22dB
808-38245	IE-SFP/1250-ED, CWDM-SM1350-LC	40km - 22dB
808-38246	IE-SFP/1250-ED, CWDM-SM1370-LC	40km - 22dB
808-38247	IE-SFP/1250-ED, CWDM-SM1390-LC	40km - 22dB
808-38248	IE-SFP/1250-ED, CWDM-SM1410-LC	40km - 22dB
808-38249	IE-SFP/1250-ED, CWDM-SM1430-LC	70km - 22dB
808-38250	IE-SFP/1250-ED, CWDM-SM1450-LC	70km - 22dB
808-38251	IE-SFP/1250-ED, CWDM-SM1470-LC	70km - 22dB
808-38252	IE-SFP/1250-ED, CWDM-SM1490-LC	70km - 22dB
808-38253	IE-SFP/1250-ED, CWDM-SM1510-LC	70km - 22dB
808-38254	IE-SFP/1250-ED, CWDM-SM1530-LC	70km - 22dB
808-38255	IE-SFP/1250-ED, CWDM-SM1550-LC	70km - 22dB
808-38256	IE-SFP/1250-ED, CWDM-SM1570-LC	70km - 22dB
808-38257	IE-SFP/1250-ED, CWDM-SM1590-LC	70km - 22dB
808-38258	IE-SFP/1250-ED, CWDM-SM1610-LC	70km - 22dB

# SMALL FORM PLUGGABLE “SFP” MODULES - continued

## IE-SFP/1250-ED (Cisco-Compatible)

### 1.25 Gbps (OC-24) Modules - IE extended temperature ranges

#### 1250 Mbps/1.25 Gbps

MODEL #	DESCRIPTION	DISTANCE - dB
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#### 10/100/1000 Mbps Multi-rate Ethernet (Copper)

- IE extended temperature range 0°C to +85°C

808-39001CC	SFP/10-1250, TX	100m
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#### 1000 Mbps Ethernet (Copper)

- IE extended temperature range 0°C to +85°C

808-39010CC	SFP/1250, TX	100m
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### 1.25 Gbps Gigabit Ethernet (GbE)

- with extended diagnostics - ED/DDMI

MODEL #	DESCRIPTION	DISTANCE - dB
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#### IE-SFP/1250-ED

- IE extended temperature range -40°C to +85°C

808-38201CC	IE-SFP/1250-ED, MM850-LC	220/550m - 7.5dB
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808-38202CC	IE-SFP/1250-ED, SM1310-LC	20km - 15dB
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808-38203CC	IE-SFP/1250-ED, SM1310/PLUS-LC	30km - 17dB
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#### IE-SFP/1250-ED, Single-strand Fiber

- IE extended temperature range -40°C to +85°C

808-38227CC	IE-SFP/1250-ED, SSBX-SM1310-SC (1310xmt/1490rcv)	10km - 12.5dB
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808-38228CC	IE-SFP/1250-ED, SSBX-SM1490-SC (1490xmt/1310rcv)	10km - 12.5dB
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#### IE-SFP/1250-ED, Single-strand Fiber, LC connectors

- IE extended temperature range -40°C to +85°C

808-38727CC	IE-SFP/1250-ED, SSBX-SM1310-LC (1310xmt/1490rcv)	10km - 12.5dB
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808-38728CC	IE-SFP/1250-ED, SSBX-SM1490-LC (1490xmt/1310rcv)	10km - 12.5dB
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## IE-SFP /2.4-ED

### 2.4 Gbps (OC-48) Modules - IE extended temperature ranges

#### 2.4 Gbps Ethernet (OC 48)

- with extended diagnostics - ED/DDMI

MODEL #	DESCRIPTION	DISTANCE - dB
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#### IE-SFP/2.4-ED

- IE extended temperature range -40°C to +85°C

808-38301	IE-SFP/2.4-ED, MM850-LC	300m - 7.5dB
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808-38302	IE-SFP/2.4-ED, SM1310-LC	2km - 8.5dB
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808-38303	IE-SFP/2.4-ED, SM1310/PLUS-LC	15km - 13dB
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808-38304	IE-SFP/2.4-ED, SM1550/LONG-LC	40km - 16dB
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#### IE-SFP/2.4-ED, Single-strand Fiber

- IE extended temperature range -40°C to +85°C

808-38311	IE-SFP/2.4-ED, SSLX-SM1310-LC (1310xmt/1550rcv)	10km - 9dB
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808-38312	IE-SFP/2.4-ED, SSLX-SM1550-LC (1550xmt/1310rcv)	10km - 9dB
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808-38313	IE-SFP/2.4-ED, SSLX-SM1310/PLUS-LC (1310xmt/1550rcv)	20km - 13dB
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808-38314	IE-SFP/2.4-ED, SSLX-SM1550/PLUS-LC (1550xmt/1310rcv)	20km - 13dB
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808-38315	IE-SFP/2.4-ED, SSLX-SM1310/LONG-LC (1310xmt/1550rcv)	40km - 20dB
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808-38316	IE-SFP/2.4-ED, SSLX-SM1550/LONG-LC (1550xmt/1310rcv)	40km - 20dB
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## IE-SFP+/10G-ED & IE-XFP/10G-ED

### 10 Gbps (OC 192) Modules - IE extended temperature ranges

#### 10 Gbps Ethernet (OC 192)

- with extended diagnostics - ED/DDMI

MODEL #	DESCRIPTION	DISTANCE - dB
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#### IE-SFP+/10G-ED

808-38600	IE-SFP+SR/10G-ED, MM850-LC (IE = -10°C to +85°C)	33m - 2.8dB
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808-38601	IE-SFP+LR/10G-ED, SM1310-LC (IE = -25°C to +85°C)	10km - 8.4dB
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#### IE-XFP/10G-ED

808-38610	IE-XFP SR/10G-ED, MM850-LC (IE = -10°C to +85°C)	33m - 2.8dB
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808-38611	IE-XFP LR/10G-ED, SM1310-LC (IE = -25°C to +85°C)	10km - 8.4dB
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808-38612	IE-XFP ER/10G-ED, SM1550-LC (IE = -5°C to +70°C)	40km - 15dB
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808-38613	IE-XFP ZR/10G-ED, SM1550/PLUS-LC (IE = -5°C to +70°C)	80km - 23dB
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# FIBER OPTIC SPECIFICATIONS (Distance - dB Power Budget)

## 100 Mbps Fixed Fiber

<i>Dual-strand</i>		
FX-MM850		2km - 14dB
FX-MM1300		5km - 11dB
FX-SM1310		10km - 19dB
FX-SM1310/PLUS		40km - 19dB
FX-SM1310/LONG		80km - 31dB
FX-SM1550/LONG		80km - 31dB
FX-SM1550/XLONG		100km - 38dB
<i>Single-strand</i>		
SSFX-SM1310 (1310xmt/1550rcv)		20km - 17dB
SSFX-SM1550 (1550xmt/1550rcv)		20km - 17dB
SSFX-SM1310/PLUS (1310xmt/1550rcv) (XT)		40km - 26dB
SSFX-SM1550/PLUS (1550xmt/1310rcv) (XT)		40km - 26dB
SSFX-SM1310/LONG (1310xmt/1550rcv)		60km - 31dB
SSFX-SM1550/LONG (1550xmt/1310rcv)		60km - 31dB
<i>CWDM</i>		
FX-CWDM-SM1270-1610		80km - 33dB

## 100 Mbps IE-SFP

<i>Dual-strand</i>		
SFP/155-FX-MM850		2km - 14.5dB
SFP/155-FX-MM1300		2km - 13dB
SFP/155-FX-SM1310		20km - 21dB
SFP/155-FX-SM1310/PLUS		40km - 31dB
SFP/155-FX-SM1550/LONG		80km - 31dB
SFP/155-FX-SM1550/XLONG		120km - 34dB
<i>Single-strand (LC)</i>		
SFP/155-SSFX-SM1310 (1310xmt/1550rcv)		20km - 15dB
SFP/155-SSFX-SM1310 (1310xmt/1490rcv)		20km - 18dB
SFP/155-SSFX-SM1310/PLUS (1310xmt/1550rcv)		40km - 29dB
SFP/155-SSFX-SM1310/PLUS (1310xmt/1550rcv)		40km - 26dB
SFP/155-SSFX-SM1310/PLUS (1310xmt/1490rcv)		40km - 27dB
SFP/155-SSFX-SM1310/LONG (1310xmt/1550rcv)		60km - 31dB
SFP/155-SSFX-SM1310/LONG (1310xmt/1550rcv)		60km - 29dB
SFP/155-SSFX-SM1490/XLONG (1490xmt/1550rcv)		80km - 32dB
<i>Single-strand (SC)</i>		
SFP/155-SSFX-SM1310 (1310xmt/1550rcv)		20km - 15dB
SFP/155-SSFX-SM1550 (1550xmt/1310rcv)		20km - 15dB
SFP/155-SSFX-SM1310/PLUS (1310xmt/1550rcv)		40km - 29dB
SFP/155-SSFX-SM1550/PLUS (1550xmt/1310rcv)		40km - 29dB
SFP/155-SSFX-SM1310/LONG (1310xmt/1550rcv)		60km - 31dB
SFP/155-SSFX-SM1550/LONG (1550xmt/1310rcv)		60km - 31dB
SFP/155-SSFX-SM1490/XLONG (1490xmt/1550rcv)		80km - 29dB
SFP/155-SSFX-SM1550/XLONG (1550xmt/1490rcv)		80km - 29dB
<i>CWDM</i>		
SFP/155-CWDM-SM1270-1610		80km - 29dB

## 1000 Mbps Fixed Fiber

<i>Dual-strand</i>		
SX-MM850		220/550m - 7.5dB
LX-MM1300		2km - 12.5dB
LX-SM1310		10km - 10.5dB
LX-SM1310/PLUS		40 km - 21dB
LX-SM1550/LONG		80km - 24dB
LX-SM1550/XLONG		100km - 32dB
<i>Single-strand</i>		
SSLX-SM1310 (1310xmt/1550rcv)		15 km - 12dB
SSLX-SM1550 (1550xmt/1310rcv)		15 km - 12dB
SSBX-SM1310 (1310xmt/1490rcv)		10km - 12dB
SSBX-SM1550 (1490xmt/1310rcv)		10km - 12dB
SSLX-SM1310/PLUS (1310xmt/1550rcv)		40km - 20dB
SSLX-SM1550/PLUS (1550xmt/1310rcv)		40km - 20dB
SSLX-SM1490/PLUS (1490xmt/1310rcv)		30km - 20dB
SSLX-SM1310/PLUS (1310xmt/1490rcv)		30km - 20dB
SSLX-SM1490/LONG (1490xmt/1550rcv)		70km - 19dB
SSLX-SM1550/XLONG (1490xmt/1550rcv)		70km - 19dB
<i>CWDM</i>		
LX-CWDM-SM1270-1610		40 km - 23 dB

## 1000 Mbps SFP

<i>Dual-strand</i>		
SFP/1250-SX-MM850		220/550m - 7.5dB
SFP/1250-LX-MM1310		2km - 10dB
SFP/1250-LX-SM1310		10km - 12.5dB
SFP/1250-LX-SM1310		20km - 15dB
SFP/1250-LX-SM1310/PLUS		30km - 17dB
SFP/1250-LX-SM1550/LONG		40km - 18dB
SFP/1250-LX-SM1550/XLONG		70km - 21dB
SFP/1250-LX-SM1550/XLONG		120km - 31dB
<i>Single-strand (LC)</i>		
SFP/1250-SSLX-SM1310-LC (1310xmt/1550rcv)		20km - 15dB
SFP/1250-SSLX-SM1550-LC (1550xmt/1310rcv)		20km - 15dB
SFP/1250-SSBX-SM1310-LC (1310xmt/1490rcv)		10km - 12.5dB
SFP/1250-SSBX-SM1490-LC (1490xmt/1310rcv)		10km - 12.5dB
SFP/1250-SSLX-SM1310/PLUS-LC (1310xmt/1550rcv)		40km - 20dB
SFP/1250-SSLX-SM1550/PLUS-LC (1550xmt/1310rcv)		40km - 20dB
SFP/1250-SSBX-SM1310/PLUS-LC (1310xmt/1490rcv)		40km - 20dB
SFP/1250-SSBX-SM1490/PLUS-LC (1490xmt/1310rcv)		40km - 20dB
SFP/1250-SSLX-SM1490/LONG-LC (1490xmt/1550rcv)		70km - 21dB
SFP/1250-SSLX-SM1550/LONG-LC (1550xmt/1490rcv)		70km - 21dB
SFP/1250-SSFX-SM1490/XLONG-LC (1490xmt/1550rcv)		120km - 31dB
SFP/1250-SSFX-SM1550/XLONG-LC (1550xmt/1490rcv)		120km - 31dB
<i>Single-strand (SC)</i>		
SFP/1250-SSLX-SM1310-SC (1310xmt/1550rcv)		20km - 15dB
SFP/1250-SSLX-SM1550-SC (1550xmt/1310rcv)		20km - 15dB
SFP/1250-SSBX-SM1310-SC (1310xmt/1490rcv)		10km - 12.5dB
SFP/1250-SSBX-SM1490-SC (1490xmt/1310rcv)		10km - 12.5dB
SFP/1250-SSLX-SM1310/PLUS-SC (1310xmt/1550rcv)		40km - 20dB
SFP/1250-SSLX-SM1550/PLUS-SC (1550xmt/1310rcv)		40km - 20dB
SFP/1250-SSBX-SM1310/PLUS-SC (1310xmt/1490rcv)		40km - 21dB
SFP/1250-SSBX-SM1490/PLUS-SC (1490xmt/1310rcv)		40km - 24dB
SFP/1250-SSLX-SM1490/LONG-SC (1490xmt/1550rcv)		70km - 19dB
SFP/1250-SSLX-SM1550/LONG-SC (1550xmt/1490rcv)		70km - 19dB
<i>CWDM</i>		
SFP/1250-CWDM-SM1270-1610		40km - 22dB

## 2.4 Gbps SFP

<i>Dual-strand</i>		
SFP/2.4-SX-MM850   SFP/2.4-SX-MM850		300m - 7.5dB
SFP/2.4-LX-SM1310   SFP/2.4-LX-SM1310		2km - 8.5dB
SFP/2.4-LX-SM1310/PLUS   SFP/2.4-LX-SM1310/PLUS		15km - 13dB
SFP/2.4-LX-SM1550/LONG   SFP/2.4-LX-SM1550/LONG		40km - 16dB
<i>Single-strand</i>		
SFP/2.4-SSFX-SM1310 (1310xmt/1550rcv)		10km - 9dB
SFP/2.4-SSFX-SM1310 (1550xmt/1310rcv)		10km - 9dB
SFP/2.4-SSFX-SM1310/PLUS (1310xmt/1550rcv)		20km - 13dB
SFP/2.4-SSFX-SM1550/PLUS (1550xmt/1310rcv)		20km - 13dB
SFP/2.4-SSFX-SM1310/LONG (1310xmt/1550rcv)		40km - 20dB
SFP/2.4-SSFX-SM1550/LONG (1550xmt/1310rcv)		40km - 20dB

## 10 Gbps SFP+, XFP+

<i>Dual-strand</i>		
SFP+/10G-MM850		33m - 2.8dB
SFP+/10G-SM1310		10km - 8.4dB
XFP/10G-MM850		33m - 2.8dB
XFP/10G-SM1310		10km - 8.4dB
XFP/10G-SM1550		40km - 15dB
XFP/10G-SM1550/PLUS		80km - 23dB

## Product Excellence

# CERTIFICATIONS & STANDARDS

*B+B SmartWorx aims towards stringent manufacturing processes and quality assurance in all our products - every step of the way – from component and parts selection, to manufacturing, to testing and final packaging.*

- SMTA (Surface-Mount Technology Association) member
- RoHS Compliant (Directive 2002/95/EC)
- RoHS2 Compliant (Directive 2002/95/EC) (in progress)
- WEEE Compliant (Directive 2002/96/EC)
- REACH EU (Directive 1907/2006) (in progress)
- ISO9001:2008
- IPC Standards Certified
  - ANSI/J-STD-001D – Requirements for Soldered Electrical and Electronic Assemblies
  - IPC-A-610 C – Acceptability of Electronic Assemblies – Class 3
  - IPC-7721 – Repair and Modifications of Printed Boards and Electronic Assemblies
- UL/FCC
- Class 1/Division 2
- NEMA TS2
- EN/UL 60950

## Environmental Compliance and Quality

### RoHS

The European Union enacted revised legislation in an effort to reduce the use of certain hazardous materials in products being sold in the EU. Directive 2011/65/EU on the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (RoHS) allows a maximum concentration value for lead, mercury, hexavalent chromium, polybrominated biphenyls (PBB), polybrominated biphenyl ethers (PBDE) and cadmium in electrical and electronic equipment supplied in the course of business for distribution, consumption or use in the EU.

### WEEE Compliance

The European Union adopted Directive 2002/96/EC on the Waste Electrical and Electronic Equipment (WEEE) with requirements that went into effect August 13th, 2005. The WEEE Directive is intended to reduce the disposal of waste from electrical and electronic equipment by establishing guidelines for prevention, reuse, recycling, and recovery. B+B SmartWorx has adhered to WEEE regulations since August 13th, 2005.

### 3TG Compliance

In July 2010, the United States enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Act”) which contained a section (Sec. 1502) that regulated “Conflict Minerals”<sup>1</sup> for the first time. The Act includes provisions that require manufacturers to perform due diligence in their supply chains to identify and disclose the use of any Conflict Minerals and whether those Conflict Minerals originated in the “DRC Countries”<sup>2</sup> The Act is new and regulations related to the requirements of the due diligence process have not yet been issued by the US Securities and Exchange Commission, which oversees compliance with the Conflict Minerals section of the Act. Due to the complexities of the mineral supply chain, B+B SmartWorx is currently unable to verify the origin for the minerals used in products. We do not knowingly source any product containing conflict minerals from the DRC Countries currently; however we are unable to provide clear supply chain verification at this time.

### Quality

B+B SmartWorx is committed to providing our customers with the highest quality products and continually improving our processes to meet and exceed customer standards. Our ISO 9001:2008 Certification is an affirmation of these processes conforming to the standard quality practices in the industry.

# Certified For Hazardous Locations CLASS I/DIVISION 2 PRODUCTS

For applications that require C1/D2 certification, B+B SmartWorx has a range of communication solutions designed to operate in hazardous environments.



## WIRED ROUTERS

(Spectre™ RTLTE models)

- Ethernet, USB, I/O, Serial RS-232/422/485
- WiFi access point
- Wide operating temperature
- Modbus compatible
- Certifications: C1/D2, FCC, CE, RoHS
- Certified for use with North American carriers (USA, Canada)

## ETHERNET SWITCHES

(Elinx™ ESW100, ESW200 models)

- Managed & unmanaged
- 5 or 8 ports; copper, LC, SC, ST fiber
- Redundant AC/DC power inputs
- IP30 metal case is DIN or 6-way panel mountable
- Ultra slimline (ESW100 series)
- Wide temperature (ESW200 series)
- Certifications: C1/D2, NEMA TS2, 61000-6-2/Level 3, IEC60068-2 shock/vibration, FCC, CE, RoHS

## ETHERNET GB SWITCH

(Model EIR408-T)

- Unmanaged
- Gigabit speed for higher throughput in high bandwidth networks
- 8 10/100/1000 Base-T Ethernet ports
- Dual 12 to 48 VDC power inputs
- Wide temperature
- IP30 case is DIN or panel mountable
- Certifications: C1/D2, UL/cUL 60950, NEMA TS2, IEC60068-2 shock/vibration, FCC, CE, RoHS

## POWER-OVER-ETHERNET SWITCHES

(Models EIRHP305-T, EIRP305-24V-T)

- Simplify powering of remote devices
- Dual power inputs and alarm output
- IP30 case is DIN or panel mountable
- Wide temperature
- 24 or 48VDC power input (Model EIRP305-24V-T)
- 48VDC power input (Model EIRHP305-T)
- Certifications: C1/D2, UL/cUL/us, PoE (IEEE802.3x), FCC, CE, RoHS



## ETHERNET MEDIA CONVERTERS

(Models EIR-M-ST, EIR-M-SC, EIR-S-SC)

- Converts copper to fiber
- 10/100Base
- Redundant 10-48 power inputs
- Auto negotiation for data rate and duplex modes
- MDI/MDI-X (auto cross-over)
- Wide temperature
- Certifications: C1/D2, NEMA TS2, IEC61000-6-2, FCC, CE, RoHS

## CELLULAR ROUTERS

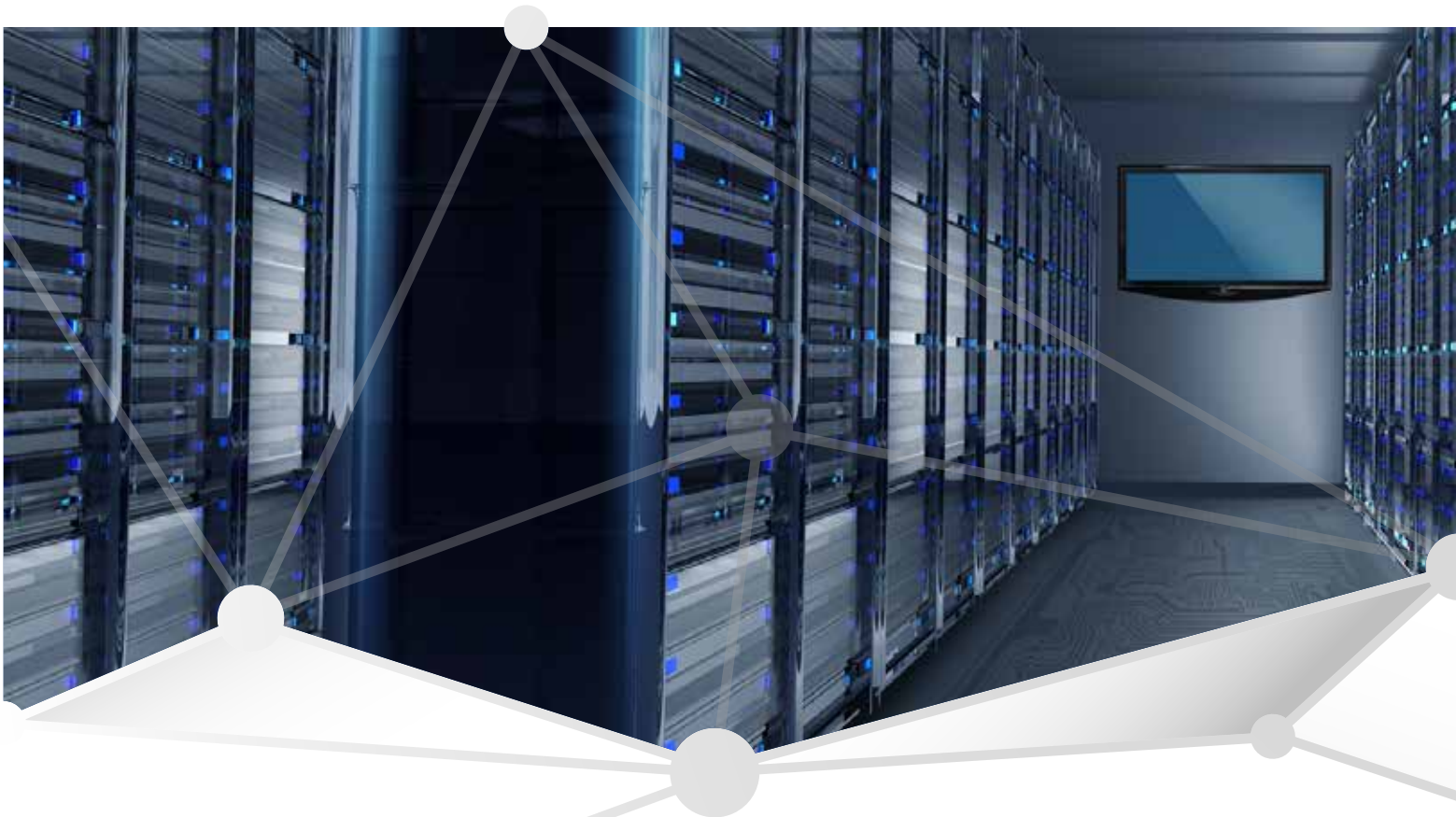
(Spectre™ LTE-v2 models)

- Cellular router technologies: LTE/3G
- Ethernet, USB, I/O, RS-232/422/485
- WiFi access point
- Wide operating temperature
- Modbus compatible
- Certified for use with multiple North American carriers (USA, Canada)
- Certifications: C1/D2, FCC, CE, RoHS

## ACCESSORIES

- Power supplies
- NEMA enclosures & back panels
- Cabling
- Terminal blocks

Contact B+B SmartWorx, your distributor, or channel partner for complete details.



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[bb-smartworx.com/custom.asp](http://bb-smartworx.com/custom.asp)