

10/100BaseT/TX to 100BaseFX Media Converters



Signamax Connectivity Systems' Switching Media Converters with Link Fault Signaling (LFS) provide the means for an SNMP-Managed switch to recognize a failure on a fiber channel or twisted-pair connection, enabling the switch to automatically route to a backup path if the connected switch is equipped with Spanning Tree Algorithm. This intelligence maximizes the power of managed switches, and enables fail-safe design solutions for complex networks. These converters also extend the maximum singlemode fiber distance, spanning over 46 miles with the 065-1120XLD model.

The built-in 10/100 switch enables the fiber cable connection to operate at 100 Mbps connected to either a 10BaseT or a 100BaseTX network, while remaining completely 100BaseFX standard-compliant. Fiber connection can also operate in full duplex mode whether the RJ-45 port is connected to a full duplex switch or a half duplex hub, with the built-in switch providing the network segmentation that permits the maximum fiber distance. Each Media Converter provides a 10/100BaseT/TX auto-negotiating RJ-45 twisted-pair connector port featuring store-and-forward switching architecture. Auto-MDIX capability on the twisted-pair port allows for convenient connections.

KEY FEATURES

- Built-In Twisted-Pair Port 10/100 Switch
- Auto-Negotiation RJ-45 Connector with Auto-MDIX
- SC, ST, MT-RJ or SC Connector
- LEDs for Functions, Links & Activity
- Link Fault Signaling For Use With Managed Switches
- 1,024 MAC Address Capacity
- Store-and-Forward Architecture
- Full and Half Duplex Operation
- Singlemode Spans up to 75 Km
- Wall or Chassis Mountable
- IEEE 802.3 and IEEE 802.3u Compliant
- Lifetime Performance Warranty

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ORDERING INFORMATION

Part Number	Description
Multimode Converters	
065-1100	10/100BaseT/TX to 100BaseFX Media Converter, ST Multimode, 2 km span
065-1110	10/100BaseT/TX to 100BaseFX Media Converter, SC Multimode, 2 km span
065-1172	10/100BaseT/TX to 100BaseFX Media Converter, MT-RJ Multimode, 2 km span
065-1174	10/100BaseT/TX to 100BaseFX Media Converter, LC Multimode, 2 km span
Singlemode Converters	
065-1120	10/100BaseT/TX to 100BaseFX Media Converter, SC Singlemode, 15 km span
065-1120ED	10/100BaseT/TX to 100BaseFX Media Converter, SC Singlemode, 40 km span
065-1120XLD	10/100BaseT/TX to 100BaseFX Media Converter, SC Singlemode, 75 km span
DIN Rail Mounting Brackets	
065-11DINMT	DIN Rail Mounts Bracket for 065-11xx Series Media Converters

SPECIFICATIONS

- **APPLICABLE STANDARDS**
IEEE 802.3 10BaseT
IEEE 802.3u 100BaseTX
IEEE 802.3u 100BaseFX
- **FIXED PORTS**
Models: 065-1100/1110/1172/1174/1120/1120ES 1120XLD
1 Auto-MDIX twisted-pair port meeting IEEE 802.3 10BaseT & IEEE 802.3u 100BaseTX standard specifications; Category 5 or better cable, 100 meters maximum distance for 100BaseTX, Category 3 or better cable, 100 meters maximum distance for 10BaseT
plus
1 fiber optic port meeting IEEE 802.3u 100BaseFX standard specification; 62.5/125 or 50/125 micron multimode fiber optic cable, 2,000 meters maximum distance
or
1 fiber optic port meeting IEEE 802.3u 100BaseFX standard specification; 9/125 micron singlemode fiber optic cable, spanning: 15 kilometers maximum distance (Model 065-1120)
or
40 kilometers maximum distance (Model 065-1120ED)
or
75 kilometers maximum distance (Model 065-1120XLD)
- **LED INDICATORS**
Per Unit: Power status, RJ-45 port speed
Per Port: LNK/ACT, FDX/COL
Six LEDs total
- **PERFORMANCE**
Latency: < 4.2 μs (LIFO)
Throughput @ 100Base: 148,809 pps (64-byte packets)
Speed:
100BaseTX: 100/200 Mbps for half/full duplex
10BaseT: 10/20 Mbps for half/full duplex
Switching Method: Store-and-Forward
Maximum MAC Addresses: 1,024 entries
Memory: 256 KB
- **FIBER INTERFACE, MULTIMODE MODELS**
Type: LED
Wavelength: 1300 nm nominal (1270 nm maximum, 1380 nm minimum)
Maximum Output Power: - 14.0 dBm
Minimum Output Power: - 20.0 dBm
Sensitivity: -33.0 dBm
Maximum Input Power: - 8.0 dBm
Link Power Budget: 13.0 dB
- **FIBER INTERFACE, SINGLEMODE PN 065-1120**
Type: MQW Laser
Wavelength: 1300 nm nominal (1260 nm maximum, 1360 nm minimum)
Maximum Output Power: - 7.0 dBm
Minimum Output Power: - 15.0 dBm
Sensitivity: -34.0 dBm
Maximum Input Power: - 7.0 dBm
Link Power Budget: 19.0 dB
- **FIBER INTERFACE, SINGLEMODE PN 065-1120ED**
Type: MQW Laser
Wavelength: 1300 nm nominal (1261 nm maximum, 1360 nm minimum)
Maximum Output Power: - 5.0 dBm
Minimum Output Power: - 12.0 dBm
Sensitivity: -35.0 dBm
Maximum Input Power: - 5.0 dBm
Link Power Budget: 23.0 dB
- **FIBER INTERFACE, SINGLEMODE PN 065-1120XLD**
Type: MQW Laser
Wavelength: 1300 nm nominal (1270 nm maximum, 1350 nm minimum)
Maximum Output Power: + 3.0 dBm
Minimum Output Power: - 3.0 dBm
Sensitivity: -37.0 dBm
Maximum Input Power: - 0.0 dBm
Link Power Budget: 34.0 dB
- **PHYSICAL CHARACTERISTICS**
Case dimensions: 4.33"L x 3.19"W x 0.91"H (110mm x 81mm x 23mm)
Fiber connector protrusion varies with model.
Weight: 0.33 pounds (150 grams)
- **ENVIRONMENTAL CHARACTERISTICS**
Operating Temperature: 32°F ~ 104°F (0°C ~ 40°C)
Storage Temperature: -13°F ~ 158°F (-25°C ~ 70°C)
Relative Humidity: 10 ~ 90%, non-condensing
- **POWER**
External power adapter: 12 Volts DC; 600 mA
Power Consumption: 5 Watts Maximum
- **EMISSIONS**
FCC part 15 Class A, CISPR Class A, VCCI Class A, CE Mark
- **SAFETY**
UL Listed
- **WARRANTY**
Lifetime