

**10/100/1000 to 1000SX/LX Gigabit Media Converters**

Signamax Connectivity Systems' 10/100/1000 Switching Media Converter provides an intelligent solution for long distance connections between legacy 10BaseT and 100BaseTX networks and the newer 1000Base Gigabit Ethernet networks. The built-in 10/100/1000 switch enables the fiber cable connection to operate at 1000 Mbps connected to either a 10BaseT, 100BaseTX, or a 1000BaseT network, while remaining completely 1000BaseSX standard-compliant for the fiber optic connection. The 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.

Each model 065-1196 Media Converter provides a 10/100/1000BaseT/TX auto-negotiating RJ-45 twisted-pair connector port featuring store-and-forward switching architecture. Built-in switch does the network segmentation to provide the maximum fiber distance. Auto-MDIX capability on the twisted-pair port allows convenient connection.

**KEY FEATURES**

- Built-in Twisted-Pair Port 10/100/1000 Switch With Store-and-Forward Architecture
- Auto-Negotiation RJ-45 Connector w/Auto-MDIX
- LEDs for Functions, Links & Activity
- Singlemode Spans up to 20 Km
- Wall or Chassis-mountable
- Lifetime Performance Warranty

**ORDERING INFORMATION**

Part Number	Description
065-1196	10/100/1000 to 1000SX MM/SC, 220m 62.5µ/550m 50µ Converter
065-1196LX	10/100/1000 to 1000LX SM/SC, 10 km Converter
065-1196LXED	10/100/1000 to 1000LX SM/SC, 20 km Converter

**DIN Rail Mounting Bracket**

065-11DINMT	DIN Rail mounts bracket for 065-11xx series media converters
-------------	--

**SPECIFICATIONS**

• **APPLICABLE STANDARDS**

- IEEE 802.3 10BaseT
- IEEE 802.3u 100BaseTX
- IEEE 802.3ab 1000BaseT
- IEEE 802.3z 1000BaseSX
- IEEE 802.3z 1000BaseLX

• **FIXED PORTS**

1 Auto-MDIX twisted-pair port meeting IEEE 802.3 10BaseT, IEEE 802.3u 100BaseTX, & IEEE 802.3ab 1000BaseT standard specifications; Category 5e or better cable, 100 meters maximum distance for 1000BaseT, 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 802.3z 1000BaseSX standard specification; 62.5/125 micron multimode fiber optic cable, 220 meters maximum distance, or 50/125 micron multimode fiber optic cable, 550 meters maximum distance

**or**

1 fiber optic port meeting IEEE 802.3z 1000BaseLX standard specification; 9/125 micron singlemode fiber optic cable, 10 kilometers maximum distance

**or**

1 fiber optic port meeting IEEE 802.3z 1000BaseLX standard specification; 9/125 micron singlemode fiber optic cable, 20 kilometers maximum distance

• **PERFORMANCE**

- Latency:** < 4.2 µs (LIFO)
- Throughput @ 100Base:** 148,810 pps (64-byte packets)
- Throughput @ 1000Base:** 1,488,100 pps (64-byte packets)

• **FIBER INTERFACE, MULTIMODE PN 065-1196**

- Type:** Laser Diode
- Wavelength:** 850 nm nominal.
- Maximum Output:** - 4.0 dBm
- Minimum Output Power:** - 9.5
- Sensitivity:** -13.5 dBm
- Maximum Input Power:** - 13.5
- Link Power Budget:** 4.0 dB

• **FIBER INTERFACE, SINGLEMODE PN 065-1196LX**

- Type:** MQW Laser
- Wavelength:** 1300 nm nominal (1270 nm maximum, 1355 nm minimum)
- Maximum Output Power:** - 3.0 dBm
- Minimum Output Power:** - 11.0 dBm
- Sensitivity:** -22.0 dBm
- Maximum Input Power:** - 3.0 dBm
- Link Power Budget:** 11.0 dB

• **FIBER INTERFACE, SINGLEMODE PN 065-1196LXED**

- Type:** MQW Laser
- Wavelength:** 1300 nm nominal (1261 nm maximum, 1360 nm minimum)
- Maximum Output Power:** - 3.0 dBm
- Minimum Output Power:** - 8.0 dBm
- Sensitivity:** -22.0 dBm
- Maximum Input Power:** - 3.0 dBm
- Link Power Budget:** 14.0 dB

• **LED INDICATORS**

- Per Unit:** Power status, RJ-45 100 port speed, RJ-45 1000 port speed, RJ-45 FDX indicator
- Per Port:** LNK/ACT
- Six LEDs total

• **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)

• **SAFETY**

- UL Listed

• **WARRANTY**

- Lifetime