

## Gigabit Ethernet Media Converters



Signamax Connectivity Systems' Gigabit Ethernet Media Converters make it simple to extend distances over multimode or singlemode fiber. They are designed to expand the scope of your Gigabit Ethernet network applications and are 100% compliant with Ethernet IEEE 802.3ab and 802.3z specifications. These converters maintain the same form factor as other Signamax media converters, allowing use in the 065-1185 16-Bay Signamax Rack Mount Chassis. Twisted pair to fiber optic converters for both multimode and singlemode fiber, multimode to singlemode converters, and singlemode to singlemode extenders are available. In addition, the 065-1195SFP model utilizes Small Form-factor Pluggable (SFP) modules for the 1000Base fiber connection, for maximum flexibility of use in changing network architectures.

### KEY FEATURES

- Converts Twisted-Pair to Fiber or Singlemode Fiber to Multimode Fiber at Gigabit Speed
- Auto-MDIX for Twisted-Pair
- LEDs for Functions, Links & Activity
- IEEE 802.3z & 802.3ab Compliant
- 065-1195SFP Model Supports SFP Modules for Flexible 1000Base Fiber Connection
- Rack Mount or Standalone Operation
- FCC Class A & CE Approved
- Lifetime Performance Warranty

**ORDERING INFORMATION**

Part Number	Description
065-1194	1000SX to 1000LX, MM/SC to SM/SC, 10 km Converter
065-1194ED	1000SX to 1000LX, MM/SC to SM/SC, 20 km Converter
065-1195	1000T to 1000SX, MM/SC, 220 m - 62.5/125, 550 m - 50/125 Converter
065-1195SFP	1000T to 1000Base SFP interface Please see <a href="http://www.signamax.com">www.signamax.com</a> for a complete list of available SFP fiber modules.
065-1197	1000T to 1000LX, Singlemode/SC, 10 km Converter
065-1197ED	1000T to 1000LX, Singlemode/SC, 20 km Converter
065-1198XLD	1000LX to 1000LX ,Singlemode/SC, 20 km Repeater

**DIN Rail Mounting Bracket**

065-11DINMT	DIN Rail Mounts Bracket for 065-11xx Series Media Converters
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**SPECIFICATIONS**

• **APPLICABLE STANDARDS**

IEEE 802.3ab 1000BaseT  
IEEE 802.3z 1000BaseSX  
IEEE 802.3z 1000BaseLX

• **FIXED PORTS**

One twisted-pair port meeting IEEE 802.3ab standard specification; Category 5e or better cable, 100 meters maximum distance

**and/or**

One fiber optic port meeting IEEE 802.3z standard; 62.5/125 micron multimode fiber optic cable, 220 meters maximum distance or 50/125 micron multimode fiber optic cable, 550 meters maximum distance (Models 065-1194 & 065-1195)

**or**

One fiber optic port meeting IEEE 802.3z 1000BaseLX standard specification; 9/125 micron singlemode fiber optic cable, spanning 10 kilometers maximum distance (Models 065-1194 & 065-1197)

**or**

20 kilometers maximum distance (Models 065-1194ED, 065-1197ED, & 065-1198XLD)

**or**

One SFP module receptacle port meeting IEEE 802.3z standard 1000Base specifications (Model 065-1195SFP)

• **PERFORMANCE**

**Latency:** < 4.2 μs (LIFO)

**Throughput @ 1000Base:** 1,488,100 pps (64-byte packets)

• **FIBER INTERFACE, MULTIMODE PN 065-1194 & 065-1195**

**Type:** Laser Diode

**Wavelength:** 850 nm nominal.

**Maximum Output:** - 4.0 dBm

**Minimum Output Power:** - 9.5 dBm

**Sensitivity:** -13.5 dBm

**Maximum Input Power:** - 13.5 dBm

**Link Power Budget:** 4.0 dB

• **FIBER INTERFACE, SINGLEMODE PN 065-1194 & 065-1197**

**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 065-1194ED, 065-1197ED, & 065-1198XLD**

**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**

Power; TX; RX; FDX/COL; LNKF; LNKC (or LNK1; LNK2, Model 065-1198XLD)

• **ENVIRONMENTAL CHARACTERISTICS**

**Operating Temperature:**

32°F to 104°F (0°C to 40°C)

**Storage Temperature:**

-13°F to 158°F (-25°C to 70°C)

**Relative Humidity:** 10% to 90%, non-condensing

• **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