

## 10/100 To 100BaseFX PCI Based Media Converters



Signamax Connectivity Systems' Switching PCI Fiber Optic Media Converters are an excellent solution for fiber-to-the-desktop installations where the workstation computers have pre-installed Network Interfaces. These media converters are inserted into one of the PC's available PCI slots, and a copper patch cable is used to connect the media converter to the existing network interface jack on the PC's motherboard or in an adjoining PCI slot. The fiber optic cable then connects to the fiber-based cabling plan for network connectivity. Avoids the need for fiber NIC driver maintenance in environments where PCs are used in both fiber- and copper-connected areas. These converters are designed to handle both legacy 10BaseT and 100BaseTX Fast Ethernet devices on their twisted pair port while maintaining 100BaseFX Fast Ethernet transmission on the fiber optic port. Plug-and-play simplicity makes connection easy.

Each Media Converter provides a 10/100BaseT/TX auto-negotiating RJ-45 twisted-pair connector port with Auto-MDIX capability for convenient connection. 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. .

### KEY FEATURES

- Built-in Twisted-Pair Port 10/100 Switch
- Auto-negotiation RJ-45 Connector with Auto-MDIX
- SC, ST, LC, or SC Singlemode Models Available
- No External Footprint or Power Supply Required  
All Housed Within the Computer's Case
- Store-and-Forward Architecture
- Singlemode Spans up to 75 Km
- IEEE 802.3 and IEEE 802.3u Compliant
- Lifetime Performance Warranty

[www.signamax.com](http://www.signamax.com)

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**ORDERING INFORMATION**

Part Number	Description
<b>Multimode Converters</b>	
065-1060SC	10/100 to 100FX MM/ST, 2 km PCI Based Converter
065-1060ST	10/100 to 100FX MM/SC, 2 km PCI Based Converter
065-1060LC	10/100 to 100FX MM/LC, 2 km PCI Based Converter
<b>Singlemode Converters</b>	
065-1060SM	10/100 to 100FX SM/SC, 20 km PCI Based Converter
065-1060SMED	10/100 to 100FX SM/SC, 40 km PCI Based Converter
065-1060SMXLD	10/100 to 100FX SM/SC, 75 km PCI Based Converter

**SPECIFICATIONS**

• **APPLICABLE STANDARDS**

- IEEE 802.3 10BaseT
- IEEE 802.3u 100BaseTX
- IEEE 802.3u 100BaseFX
- ANSI/IEEE 802.3 NWAY Auto-negotiation
- PCI Specification 2.0/2.1.

• **FIXED PORTS**

- 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 with SC (Model 065-1060SC), ST (Model 065-1060ST), or LC (Model 065-1060LC) meeting IEEE 802.3u 100FX standard specification; 62.5/125 or 50/125 micron multimode fiber optic cable, 2,000 meters maximum distance

**OR**

- 1 SC duplex fiber optic port meeting IEEE 802.3u 100BaseFX standard specification; 9/125 micron singlemode fiber optic cable, spanning: 20 kilometers maximum distance (model 065-1060SM)

**OR**

- 40 kilometers maximum distance (model 065-1060SMED)

**OR**

- 75 kilometers maximum distance (model 065-1060SMXLD)

• **LED INDICATORS**

- Per Port: FX LNK/ACT, TX LNK/ACT; two 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

• **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 d

• **FIBER INTERFACE, SINGLEMODE PN 065-1060SM**

- 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 065-1060SMED**

- 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 065-1060SMXLD**

- 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

• **ARCHITECTURE**

- 32-Bit PCI Bus Mastering

• **POWER**

- Via computer's internal PCI bus; no external power required

• **EMISSIONS**

- FCC part 15 Class A, CISPR Class A, VCCI Class A, CE Mark

• **SAFETY**

- UL Listed

• **WARRANTY**

- Lifetime