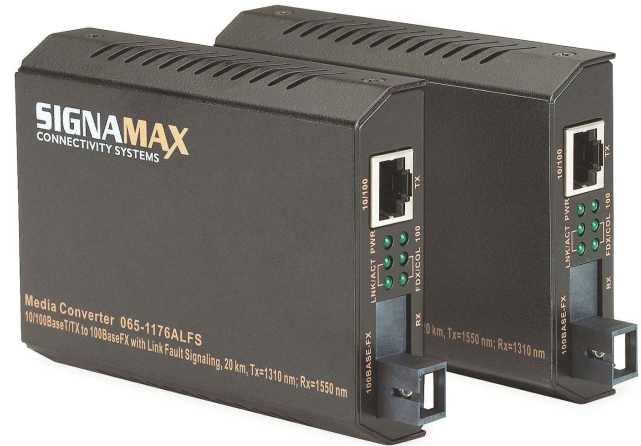


Product Specifications

10/100 to 100FX Single Fiber WDM Media Converters

KEY FEATURES

- Doubles the capacity of fiber optic networks; transmits and receives over single fiber strand
- Available with SC simplex connector
- DIP switch configuration for link fault signaling and fiber auto/force mode
- Built-in 10/100BaseT/TX Switch utilizes store-and-forward architecture
- USB power option for added convenience
- Supports wall mounting, DIN-rail mounting or use with media converter rack mount chassis



The Signamax 10/100 to 100FX Single Fiber Wave Division Multiplexing (WDM) Media Converters allow data normally carried over two strands of fiber optic cable to be carried over a single strand of fiber optic cable, utilizing two different light spectra to carry signals in both directions simultaneously. This technology doubles the capacity of a company's fiber optic network, allowing a carrier or an enterprise business to minimize its operational costs by eliminating or delaying the deployment of additional fiber optic capacity.

These converters are available in singlemode and multimode models, and span distances of up to 40 kilometers (24.85 miles). WDM Switching Media Converters must be used in A/B pairs, and all converters in this series are equipped with Link Fault Signaling to 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 when the connected switch is equipped with Spanning Tree Algorithm.

ORDERING INFORMATION

PART NO.	DESCRIPTION
065-1176ALFS	10/100BaseT/TX to 100BaseFX Single Fiber (WDM) Media Converter SC Simplex/SM, Tx=1310 nm; Rx=1550 nm, 20 km Span
065-1176BLFS	10/100BaseT/TX to 100BaseFX Single Fiber (WDM) Media Converter SC Simplex/SM, Tx=1550 nm; Rx=1310 nm, 20 km Span
065-1176AEDLFS	10/100BaseT/TX to 100BaseFX Single Fiber (WDM) Media Converter SC Simplex/SM, Tx=1310 nm; Rx=1550 nm, 40 km Span
065-1176BEDLFS	10/100BaseT/TX to 100BaseFX Single Fiber (WDM) Media Converter SC Simplex/SM, Tx=1550 nm; Rx=1310 nm, 40 km Span
065-1176ALFSMM	10/100BaseT/TX to 100BaseFX Single Fiber (WDM) Media Converter SC Simplex/MM, Tx=1310 nm; Rx=1550 nm, 2 km Span
065-1176BLFSMM	10/100BaseT/TX to 100BaseFX Single Fiber (WDM) Media Converter SC Simplex/MM, Tx=1550 nm; Rx=1310 nm, 2 km Span

SPECIFICATIONS

Applicable Standards

IEEE 802.3 10BaseT
 IEEE 802.3u 100BaseTX
 IEEE 802.3u 100BaseFX

Ports

1 - RJ-45 10/100BaseT/TX Auto-Negotiation, Auto-MDI/MDIX port plus 1 - WDM fiber optic 100BaseFX port with varying span per P/N

LED Status Indicators

Per Unit: Power
Per RJ-45 Port: Link/Activity, Full Duplex/Collision (FDX/COL); RJ-45 port speed
Per Fiber Port: Link/Activity, Full Duplex/Collision (FDX/COL)

Performance

Latency: < 4.2 μ s (LIFO)
Throughput, per port: @ 100Base: 148,809 pps (64-byte packets)
Speed: 100BaseTX: 100/200 Mbps for half/full duplex; 10BaseT: 10/20 Mbps for half/full duplex;
MAC Address Capacity: 1K; Memory: 256 KB

Electrical Characteristics

12 V DC. External 100 – 240 V AC 50/60 Hz. Power supply included.
 USB power connector on the rear panel optionally powers converter from computer's USB port.

Environmental Requirements

Operating Temperature: 32°F to 122°F (0°C to 50°C);
Storage Temperature: -13°F to 158°F (-25°C to 70°C)
Relative Humidity: 10% to 95% (non-condensing)

Physical Characteristics

Dimensions: 4.33" L x 3.16" W x 0.91" H (109.2 mm x 83 mm x 23.8 mm)
Weight: 0.33 lb (150 g)

Certifications

CE, FCC, ROHS, VCCI Class A

Warranty

Limited Lifetime

Fiber Interface

Type:

P/Ns 065-1176ALFS/1176BLFS/1176AEDLFS/1176BEDLFS: MQW Laser
 P/N 065-1176ALFSMM: Tx: VCSEL Rx: FP Laser
 P/N 065-1176BLFSMM: MQW Laser

Transmit Wavelength:

P/Ns 065-1176ALFS/1176AEDLFS: 1310 nm nominal (1260 nm max., 1360 nm min.)
 P/Ns 065-1176BLFS/1176BEDLFS: 1550 nm nominal (1480 nm max., 1580 nm min.)
 P/N 065-1176ALFSMM: 850 nm nominal (830 nm max., 860 nm min.)
 P/N 065-1176BLFSMM: 1310 nm nominal (1260 nm max., 1360 nm min.)

Receive Wavelength:

P/Ns 065-1176ALFS/1176AEDLFS: 1550 nm nominal (1480 nm max., 1580 nm min.)
 P/Ns 065-1176BLFS/1176BEDLFS: 1310 nm nominal (1260 nm max., 1360 nm min.)
 P/N 065-1176ALFSMM: 1310 nm nominal (1260 nm max., 1360 nm min.)
 P/N 065-1176BLFSMM: 850 nm nominal (830 nm max., 860 nm min.)

Max Output Power:

P/Ns 065-1176ALFS/1176BLFS: -8.0 dBm
 P/Ns 065-1176AEDLFS/1176BEDLFS/1176ALFSMM/1176BLFSMM: -3.0 dBm

Min Output Power:

P/Ns 065-1176ALFS/1176BLFS: -14.0 dBm
 P/Ns 065-1176AEDLFS/1176BEDLFS: -8.0 dBm
 P/Ns 065-1176ALFSMM/1176BLFSMM: -6.0 dBm

Sensitivity:

P/Ns 065-1176ALFS/1176BLFS/1176AEDLFS/1176BEDLFS: -33.0 dBm
 P/Ns 065-1176ALFSMM/1176BLFSMM: -28.0 dBm

Max Input Power:

All P/Ns: -3.0 dBm

Link Power Budget:

P/Ns 065-1176ALFS/1176BLFS: 19.0 dB
 P/Ns 065-1176AEDLFS/1176BEDLFS: 25.0 dB
 P/Ns 065-1176ALFSMM/1176BLFSMM: 22.0 dB

Wave Division Multiplexing (WDM):

A single strand of fiber optic cable can send and receive data using two separate light spectra. Signamax "A" version WDM converters transmit on the 1310 nm spectrum and receive on the 1550 nm spectrum. Signamax "B" version WDM converters transmit on the 1550 nm spectrum and receive on the 1310 nm spectrum. They must be used in "A" and "B" pairs.

