SIGNAMAX
Network Solutions

Product
Specifications

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

KEY FEATURES

- Extremely low latency supports larger multi-hop networks
- Extremely high reliability; MTBF of over 112 years
- Gigabit transmission supports 9K bytes jumbo frames
- IEEE 802.3x flow control for full duplex and back pressure for half duplex supported
- DIP switch configuration for link fault signalling, fiber auto/force mode, and SFP speed
- Full wire-speed forwarding rate
- Supports wall mounting, DIN-rail mounting or use with media converter rack mount chassis

The Signamax 10/100/1000 to 1000 SX/LX Switching Media Converters provide an intelligent solution for long distance connections between legacy 10BaseT and 100BaseTX networks and 1000Base Gigabit Ethernet networks. The built-in 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 or 1000BaseLX 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 legacy hub. Improvements in the this series of media converters include: extremely low latency, the ability to force the RJ-45 port to 100Base or 10Base full or half-duplex modes, provide auto-negotiation on the 1000Base fiber port or forced full-duplex mode where required, and the enabling or disabling of the Link Fault Signaling feature.

ORDERING INFORMATION

PART NO.	DESCRIPTION
065-1196A	10/100/1000BaseT/TX to 1000BaseSX Media Converter, SC/MM 220 m Span on 62.5 µm Fiber / 550 m Span on 50 µm Fiber
065-1196AED	10/100/1000BaseT/TX to 1000BaseSX Media Converter, SC/MM 2 km Span on 62.5 µm or 50 µm Fiber
065-1196ALX	10/100/1000BaseT/TX to 1000BaseLX Media Converter, SC/SM, 10 km Span
065-1196ALXED	10/100/1000BaseT/TX to 1000BaseLX Media Converter, SC/SM, 20 km Span

SPECIFICATIONS

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

Ports
1 - RJ-45 10/100/1000BaseT/TX Auto-Negotiation, Auto-MDI/MDIX port, plus 1 - 1000BaseSX or 1000BaseLX fiber optic port

LED Status Indicators
Per Unit: Power; LFS Status; Full Duplex
Per RJ-45 Port: Link Copper; Copper port speed
(Green = 1000 Mbps, Amber = 100 Mbps, off = 10 Mbps)
Per Fiber Port: Link Fiber

Environmental Requirements
Operating Temperature: 32°F to 122°F (0°C to 50°C)
Storage Temperature: -14°F to 158°F (-10°C to 70°C)
Relative Humidity: 5% to 95% (non-condensing)

Performance
Latency: ≤1.5 µs (FIFO).
MTBF: 985,339.89 hours (112.48 years), calculated via the Part Stress Analysis Method.
Throughput, per port: @ 1000Base: 1,488,100 pps (64-byte packets); @ 100Base: 148,810 pps (64-byte packets)
Switch Fabric Speed: 4.0 Gbps (non-blocking, wire speed performance)
Frame Buffer: 12K total
Jumbo Frame Support: 9K packets supported

Electrical Characteristics
12 V DC. External 100 – 240 V AC 50/60 Hz. Power supply included.

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

PSS-1196AX_A-3-16