

Product Specifications

10/100/1000 to 100/1000 OAM Managed SFP Media Converter

KEY FEATURES

- Dual-rate 1000Base or 100Base SFP capability
- IEEE 802.3ah OAM management standard supported
- Supports SNMP v1 & v2c management
- Supports Q-in-Q double tagged frame transparent
- Supports in-band loop back and diagnostic
- Gigabit transmission supports 9K bytes jumbo frames
- IEEE 802.3x flow control for full duplex and back pressure for half duplex supported
- 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 100/1000 OAM Managed SFP Media Converter provides a flexible and intelligent managed solution for long distance connections between legacy 10BaseT and 100BaseTX networks and either 1000Base Gigabit Ethernet fiber or 100Base fiber networks. The built-in 10/100/1000 switch enables the fiber cable connection to operate at 1000 Mbps, while remaining completely 1000BaseSX/LX or 100BaseFX/BX standard-compliant for the fiber optic connection. This OAM Managed Dual Rate Media Converter can be monitored and configured through management via SNMP and a Web-based Graphical User Interface.

The dual-rate fiber converter includes the ability to force the RJ-45 port to 100Base or 10Base full or half-duplex modes where required. The Link Fault Signaling provides a means of propagating a link drop on either port of the media converter to the other port, enabling a connected managed switch to see the link drop and respond to it using Spanning Tree Protocol or another recovery scheme. The built-in switch and its store-and-forward switching architecture performs the network segmentation that allows the maximum fiber distance extension.

ORDERING INFORMATION

PART NO.	DESCRIPTION
065-1696SFPDR	10/100/1000BaseT/TX to Dual-Rate 100Base or 1000Base OAM Managed SFP Media Converter
Fiber types, 100 or 1000Base speed, and distances spanned are SFP module-dependent	

SPECIFICATIONS

Applicable Standards

IEEE 802.3 10BaseT
IEEE 802.3u 100BaseTX
IEEE 802.3u 100BaseFX
IEEE 802.3ab 1000BaseT
IEEE 802.3z 1000BaseSX
IEEE 802.3z 1000BaseLX
IEEE 802.3x Flow Control
IEEE 802.3ah Operations, Administration, & Maintenance (OAM)

Ports

1 - RJ-45 10/100/1000BaseT/TX Auto-Negotiation, Auto-MDI/MDIX port,
plus 1 - Dual-rate 100Base or 1000Base SFP port.

LED Status Indicators

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

Performance

Latency: $\leq 1.6 \mu\text{s}$ (FIFO).
MTBF: 1,857,775.35 hours (212.07 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

VLAN Capabilities

IEEE 802.1Q Tag-based VLAN supported; up to 4K active VLANs possible
Supports Q-in-Q Double Tagged Frame Transparent

Management

IEEE 802.3ah OAM supported.
Access Methods: Via SNMP agent and Web browser.
Software Upgrade Capability: Via TFTP
SNMP v1 and v2c Network Management supported.
Supports In-Band Loop Back and Diagnostic.

Electrical Characteristics

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

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)

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