

Single Fibre WDM Converters

Signamax Connectivity Systems' Switching Single Fibre Wave Division Multiplexing (WDM) Media Converters with Link Fault Signaling allow data typically carried over two strands of fibre optic cable to be carried over a single strand of fibre optic cable, utilizing two different wavelengths to carry signals in both directions simultaneously. This technology doubles the capacity of a company's fibre optic network, allowing a carrier or an enterprise business to minimize its operational costs by eliminating or delaying the deployment of additional fibre optic capacity. These converters are available in singlemode only, and span distances of up to 40 kilometers (24.85 miles) with the 065-1176AEDLFS and 065-1176BEDLFS models.

Since WDM Switching Media Converters utilize two different wavelengths with one end of a circuit transmitting on the other end's receive frequency (and vice versa), they must be used in A/B pairs. A circuit utilizing these converters would therefore use a single strand of singlemode fibre optic cable plus one each of the 065-1176ALFS and 065-1176BLFS, or one each of the 065-1176AEDLFS and 065-1176BEDLFS and 065-1176BLFS, depending upon the distance spanned. All Signamax WDM converters are equipped with Link Fault Signaling to provide the means for an SNMP-managed switch to recognize a failure on a fibre channel or twisted-pair connection, enabling the switch to automatically route to a backup path if the connected switch is equipped with Spanning Tree Algorithm. Each WDM Media Converter provides a 10/100BaseT/TX auto-negotiating RJ45 twisted-pair connector port, and features store-and-forward switching architecture. Auto-MDIX capability on the twisted-pair port is also provided for convenient connections.

SPECIFICATIONS

APPLICABLE STANDARDS

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

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 WDM fibre optic port meeting IEEE 802.3u 100BaseFX standard specification;

9/125 micron singlemode fibre optic cable, spanning 20 kilometers maximum distance (models 065-1176ALFS and 065-1176BLFS) or

1 WDM fibre optic port meeting IEEE 802.3u 100BaseFX standard specification:

9/125 micron singlemode fibre optic cable, spanning 40 kilometers maximum distance (models 065-1176AEDLFS and 065-1176BEDLFS)

PERFORMANCE

Latency: < 4.2 µs (LIFO) Throughput @ 100Base: 148,809 pps (64-byte packets) LEDs

Per unit: Power status, RJ45 port speed, Per Port: LNK/ACT, FDX/COL Six LEDs total

PHYSICAL CHARACTERISTICS

Case dimensions (L x W x H): 110 x 81 x 23 mm (4.33 x 3.19 x 0.91") Fibre optic interface varies with model.

Weight: 150 grams

USB power connector on the rear panel optionally powers converter from computer's USB port.

UL Listed

Single Fibre WDM Media Converters (Fibre type: Simplex SC Singlemode)

PART NO.	DESCRIPTION	FIBRE TYPE
065-1176ALFS	10/100BaseT/TX to 100BaseFX, SM/SC, 20 km, Tx=1,310 nm; Rx=1,550 nm	Simplex SC Singlemode
065-1176BLFS	10/100BaseT/TX to 100BaseFX, SM/SC, 20 km, Tx=1,550 nm; Rx=1,310 nm	Simplex SC Singlemode
065-1176AEDLFS	10/100BaseT/TX to 100BaseFX, SM/SC, 40 km, Tx=1,310 nm; Rx=1,550 nm	Simplex SC Singlemode
065-1176BEDLFS	10/100BaseT/TX to 100BaseFX, SM/SC, 40 km, Tx=1,550 nm; Rx=1,310 nm	Simplex SC Singlemode
065-11DINMT	DIN rail mounting bracket for 065-11xx series media converters	



Model 065-1176ALFS



SAFETY