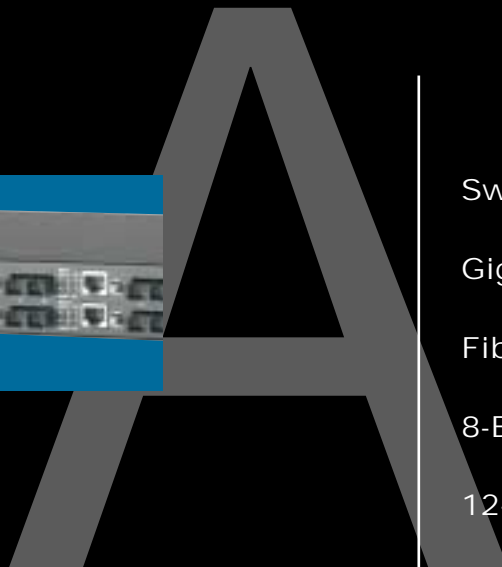




Media Converters



Switching Fiber Media Converters

Gigabit Media Converters

Fiber Optic Media Converters

8-Bay Media Converter Chassis

12-Port Fixed Media Converters

A

MEDIA CONVERTER SYSTEMS

Signamax Connectivity Systems' Switching Media Converters provide an intelligent solution for long distance connections between legacy 10BaseT networks and the newer 100BaseTX Fast Ethernet. These converters are designed to handle a wide variety of fiber optic network applications and eliminate the 412 meter distance limitation when connecting hub-based sub-networks. They also extend the maximum singlemode fiber distance, spanning over 46 miles with the 065-1120XLD model.

10/100 Switching Fiber Media Converters



Switching Fiber Optic Media Converter Products

PART NO.	DESCRIPTION	FIBER TYPE
065-1100	10/100BaseT/TX to 100BaseFX Converter	ST Multimode
065-1110	10/100BaseT/TX to 100BaseFX Converter	SC Multimode
065-1170	10/100BaseT/TX to 100BaseFX Converter	VF-45 Multimode
065-1172	10/100BaseT/TX to 100BaseFX Converter	MT-RJ Multimode
065-1174	10/100BaseT/TX to 100BaseFX Converter	LC Multimode
065-1120	10/100BaseT/TX to 100BaseFX Converter	SC Singlemode (15 km span)
065-1120ED	10/100BaseT/TX to 100BaseFX Converter	SC Singlemode (40 km span)
065-1120XLD	10/100BaseT/TX to 100BaseFX Converter	SC Singlemode (75 km span)

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. 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 hub. Each Media Converter provides a 10/100BaseT/TX auto-negotiating RJ-45 twisted-pair connector port featuring store-and-forward switching architecture. Built-in switch does the network segmentation to provide the maximum fiber distance.

SPECIFICATIONS

APPLICABLE STANDARDS

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

FIXED PORTS

1 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 meeting IEEE 802.3u 100BaseFX standard specification; 62.5/125 or 50/125 micron multimode fiber optic cable, 2,000 meters maximum distance

or

1 fiber optic port meeting IEEE 802.3u 100BaseFX standard specification; 9/125 micron singlemode fiber optic cable, spanning: 15 kilometers maximum distance (Model 065-1120)

or

40 kilometers maximum distance (Model 065-1120ED)

or

75 kilometers maximum distance (Model 065-1120XLD)

PERFORMANCE

Latency: < 4.2 μ s (LIFO)

Throughput: 148,809 pps (64-byte packets)

LED INDICATORS

Per unit - Power status, RJ-45 port speed

Per Port -LNK/ACT, FDX/COL

Six LEDs total

PHYSICAL CHARACTERISTICS

Case dimensions: Length 110 mm

x Width 81 mm x Height 23 mm

(4.33 inches x 3.19 inches x 0.91 inches)

Fiber connector protrusion varies with model.

Weight: 150 grams (0.33 pounds)

SAFETY

UL Listed



Model
065-1100



Model
065-1110



Model
065-1170



Model
065-1172

A

MEDIA CONVERTER SYSTEMS

Signamax Connectivity Systems' Gigabit Ethernet Media Converters make it simple to extend distances over multimode or singlemode fiber. They are designed to expand the scope of your Gigabit Ethernet network applications and are 100% compliant with Ethernet IEEE 802.3ab and 802.3z specifications. These converters maintain the same form factor as other Signamax media converters, allowing use in the Model 065-1180 Signamax Rack Mount Chassis. Twisted pair to fiber optic converters for both multimode and singlemode fiber, multimode to singlemode converters, and singlemode to singlemode extenders are available.

Gigabit Ethernet Fiber Media Converters

SPECIFICATIONS

APPLICABLE STANDARDS

IEEE 802.3ab 1000BaseT
IEEE 802.3z 1000BaseLX
IEEE 802.3z 1000BaseSX

FIXED PORTS

One twisted-pair port meeting IEEE 802.3ab standard specification; Category 5e or better cable, 100 meters maximum distance

and/or

One fiber optic port meeting IEEE 802.3z standard; 62.5/125 micron multimode fiber optic cable, 220 meters maximum distance or 50/125 micron multimode fiber optic cable, 550 meters maximum distance (Models 065-1194 & 065-1195)

or

1 fiber optic port meeting IEEE 802.3z 1000BaseLX standard specification; 9/125 micron singlemode fiber optic cable, spanning 10 kilometers maximum distance (Models 065-1194 & 065-1197)

or

20 kilometers maximum distance (Models 065-1194ED, 065-1197ED, & 065-1198XLD)

PERFORMANCE

1,488,000 packets per second at 1000 Mbps

LED INDICATORS

Power; TX; RX; FDX/COL; LNK1; LNK2 (or LNK1; LNK2, Model 065-1198XLD)

PHYSICAL CHARACTERISTICS

Dimensions: Length 110 mm x Width 81 mm x Height 23 mm (4.33 inches x 3.19 inches x 0.91 inches)

Weight: 50 grams (0.33 pounds)

SAFETY

UL Listed



Gigabit Ethernet Media Converter

PART NO.	DESCRIPTION
065-1194	1000BaseSX to 1000BaseLX Gigabit Ethernet SC multimode to SC singlemode media converter, 10 km span
065-1194ED	1000BaseSX to 1000BaseLX Gigabit Ethernet SC multimode to SC singlemode media converter, 20 km span
065-1195	1000BaseT to 1000BaseSX Gigabit Ethernet media converter, SC multimode
065-1197	1000BaseT to 1000BaseLX Gigabit Ethernet media converter, SC singlemode, 10 km span
065-1197ED	1000BaseT to 1000BaseLX Gigabit Ethernet media converter, SC singlemode, 20 km span
065-1198XLD	1000BaseLX to 1000BaseLX Gigabit Ethernet fiber optic repeater, SC singlemode, 20 km span each port

Signamax Connectivity Systems' Media Converters reduce cabling cost by providing flexible fiber optic solutions for Ethernet LANs and WAN connectivity. Models are available for direct connection to RJ-45 and fiber optic ports on both Ethernet and Fast Ethernet devices, or for use with singlemode fiber carrier demarcation points. These offer a wide variety of conversion solutions, providing network expansion at the lowest cost possible.

Each Media Converter is enclosed in a compact, strong metal case and includes an external power supply for stand-alone applications. They can also be installed without modification in the Signamax 065-1180 Rack Mount Chassis featuring redundant power supplies for high reliability and in multiple installations. The multi-functional design eliminates the need to stock separate units for rack mount and standalone requirements.

Fiber Optic Media Converters



Fiber Optic Media Converter

PART NO.	DESCRIPTION
065-1140	10BaseT to 10BaseFL ST Multimode
065-1150	10BaseT to 10BaseFL SC Singlemode (20 km span)
065-1160	10BaseT to 10Base2 — BNC Connector
065-1130	100BaseFX SC Singlemode (15 km span) to ST Multimode
065-1130ED	100BaseFX SC Singlemode (40 km span) to ST Multimode
065-1130XLD	100BaseFX SC Singlemode (75 km span) to ST Multimode
065-1132	100BaseFX SC Singlemode (15 km span) to SC Multimode
065-1132ED	100BaseFX SC Singlemode (40 km span) to SC Multimode
065-1132XLD	100BaseFX SC Singlemode (75 km span) to SC Multimode
065-1190	ATM 155Mbps SC Singlemode (20 km span) to ST Multimode

SPECIFICATIONS

APPLICABLE STANDARDS

Ethernet IEEE 802.3 and IEEE 802.3u
Asynchronous Transfer Mode (ATM) 155 Mbps Specifications (model 065-1190)
Synchronous Optical Network (SONET) Optical Carrier – 3 (OC-3) Specifications (model 065-1190)

FIXED PORT SPECIFICATIONS

10BaseT twisted-pair interface, Models 065-1140, 065-1150, & 065-1160: RJ-45 connector, 100 meters max distance
10BaseT twisted pair cable interface, Model 065-1160: BNC connector, 185 meters max. distance
10Base2 coaxial cable interface, Model 065-1140: ST connector; 2000 meters max. distance
10BaseFL multimode fiber optic interface, Model 065-1150: SC connector; 20 kilometers max. distance
10BaseFL singlemode fiber optic interface, Model 065-1130, 065-1130ED, 065-1130XLD, & 065-1190: ST connector; 2000 meters max. distance
100BaseFX multimode fiber optic interface, Model 065-1132, 065-1132ED, & 065-1132XLD: SC connector; 2000 meters max. distance
100BaseFX multimode fiber optic interface, Models 065-1130, 065-1130ED, 065-1130XLD, 065-1132, 065-1132ED, & 065-1132XLD: SC connector, 100BaseFX singlemode fiber interface; Standard models: 15 kilometers max. distance
ED Models: 40 kilometers max. distance
XLD Models: 75 kilometers max. distance
SONET OC-3 / ATM 155 Mbps multimode fiber optic interface, Model 065-1190: ST connector; 2000 meters max. distance
SONET OC-3 / ATM 155 Mbps singlemode fiber optic interface, Model 065-1190: SC connector; 20 kilometers max. distance

PERFORMANCE

Delay:

Models 065-1140, 065-1150, & 065-1160: less than 23 bit times
Models 065-1130 series, 065-1132 series, & 065-1190: less than 21 bit times

PHYSICAL CHARACTERISTICS

Case dimensions: Length 110 mm x Width 81 mm x Height 23 mm (4.33 inches x 3.19 inches x 0.91 inches)
Fiber connector protrusion varies with model.
Weight: 150 grams (0.33 pounds)

SAFETY

UL Listed

A

MEDIA
CONVERTER
SYSTEMS

Signamax Connectivity Systems' Model 065-1180 Rack Mount Chassis is a carrier or enterprise level rack mounting system designed to accommodate the line of Signamax Ethernet Media Converters. Multi-functional chassis allows the same Media Converter to be used as either a standalone or as a rack mountable component. The system ships standard with two hot-swappable, fully redundant, load-sharing power supplies to ensure continued availability of the media converters in the event of a power supply failure. It also ships with three fully redundant, load-sharing cooling fans as a standard configuration.

The Signamax model 065-1180 Rack Mount Chassis is a system worthy of any TELCO or Interexchange Carrier installation. It is easy to maintain, easy to service, and absorbs substantial abuse without failure.

8-Bay Media Converter Rack Mount Chassis



8-Bay Rack Mount Media Converter Chassis

PART NO.	DESCRIPTION
065-1180	Rack Mount Media Converter Chassis System, includes 2 Redundant Power Supplies & 3 Fan Cooling Assemblies
FO-AC-1180	Spare Redundant Power Supply For 8-Bay Chassis
FO-1180FAN	Spare Individual Fan Assembly For 8-Bay Chassis

SPECIFICATIONS

CAPACITY

Eight bays for up to eight 065-11xx series media converters

LED STATUS INDICATORS

Power: Power supply on-line

Fan1/Fan2/Fan3: LED indicates that the fan is on-line

Bay 1 — Bay 8: LED indicates bay is occupied and associated Media Converter is receiving power

PHYSICAL CHARACTERISTICS

Dimensions: 430 mm Wide x 290 mm Deep x 133 mm High (17.0 in. x 11.5 in. x 5.1 in.)

3 standard rack units

Weight: Approximately 5.2 kilograms (11.5 pounds), fully loaded

POWER SUPPLIES

Load-sharing and hot-swappable; 2 supplied as standard equipment

SAFETY

Power Supplies: UL 1950 Listed, CSA 234, 22.2, TUV EN60950

Cooling Fans: UL/cUL/TUV Listed/Approved.

The Signamax 065-1200 12-Channel Rack Mount Media Converter is a perfect solution for large installations that utilize many of the same type of media converters. The 065-1200 contains 12 channels of media conversion in a standard rack mountable case only one rack unit high. This extremely high port density allows the maximum number of media converter channels per rack for enterprise-level businesses and carriers. Redundant fan-cooled power supplies ensure system uptime.

The 065-1200 has a choice of configurations, utilizing the same technology and connector types as the standalone media converters in the 065-1100 series for 10/100BaseT/TX to 100BaseFX conversion. In addition, the 065-1200 can be optionally equipped with twelve channels of Gigabit Ethernet 1000BaseT to 1000BaseSX media conversion, emulating twelve 065-1195 converters.

12-Port Rack Mount Media Converter



12-Channel Rack Mount Media Converter

PART NO.	DESCRIPTION
065-1200ST00	10/100BaseT/TX to 100BaseFX Converters ST Multimode
065-1200SC10	10/100BaseT/TX to 100BaseFX Converters SC Multimode
065-1200VF70	10/100BaseT/TX to 100BaseFX Converters VF-45 Multimode
065-1200MT72	10/100BaseT/TX to 100BaseFX Converters MT-RJ Multimode
065-1200LC74	10/100BaseT/TX to 100BaseFX Converters LC Multimode
065-1200SC20	10/100BaseT/TX to 100BaseFX Converters SC Singlemode (15 km span)
065-1200SC20ED	10/100BaseT/TX to 100BaseFX Converters SC Singlemode (40 km span)

Please see specification sheet for additional configurations.

SPECIFICATIONS

APPLICABLE STANDARDS

IEEE 802.3 10BaseT
 IEEE 802.3u 100BaseTX
 IEEE 802.3u 100BaseFX
 IEEE 802.3ab 1000BaseT
 IEEE 802.3z 1000BaseSX

FIXED PORTS

Twelve channels of media conversion, each with a twisted pair port and a corresponding fiber optic port meeting either of the following specifications:

065-11xx series version:

10/100BaseT/TX to 100BaseFX, multimode fiber; choice of SC, ST, VF-45 or MT-RJ connectors; maximum distance: 2,000 meters
 10/100BaseT/TX to 100BaseFX, singlemode fiber, SC connectors; MT-RJ connectors available by special order. Maximum distance: up to 75 kilometers

LED Status Indicators:

Per unit - Power status, Speed (2 LEDs)
 Per port - LNK/ACT, FDX/COL (2 LEDs)

065-1195 version:

1000BaseT to 1000BaseSX, multimode fiber, SC connectors; MT-RJ connectors available by special order. Maximum distance, 1000BaseSX port: 220 meters over 62.5 micron multimode fiber or 550 meters over 50/125 micron multimode fiber (full duplex only)

LED Status Indicators:

Per unit - Power status, FDX/COL, TX, RX (4 LEDs)
 Per port - LNK for fiber port, LNK for copper port (1 LED each)

PHYSICAL CHARACTERISTICS

Dimensions: W440mm x D205mm x H45mm (17.3" x 8.0" x 1.8")

Weight: 3.1 kg (6.8 lbs.) maximum
 Standard 19-in rack mounting (hardware included)

SAFETY

UL 1950

WARRANTY

Lifetime, including power supplies