

SIGNAMAX **CONNECTIVITY SYSTEMS**

Signamax™ Connectivity Systems
ATM-155/622 Multimode to
Singlemode Converter
Model 065-1190

U S E R ' S G U I D E

SignamaxTM Connectivity Systems

**ATM-155/622 Multimode to
Singlemode Converter
Model 065-1190**

User's Guide

FCC Warning

This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with this user's guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE Mark Warning

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

Trademarks

Product names mentioned in this manual may be trademarks or registered trademarks of those products and are hereby acknowledged.

- Ethernet is a trademark of Xerox Corporation.
- Microsoft Windows is a trademark of Microsoft Corporation.
- Signamax™ Connectivity Systems is a trademark of Advanced Electronic Support Products, Inc.

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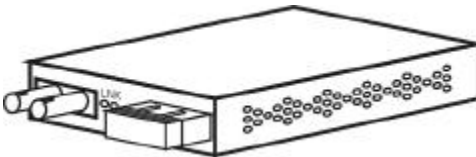
INTRODUCTION

Product Overview:

The Signamax[™] ATM Multimode to Singlemode Media Converter is primarily designed for network or data installations that require extended fiber distances of 1300nm fiber media for ATM-155/622. Used individually or in conjunction with other converters, the fiber cable distances can be greatly increased.

These Converters have been designed to support both ST and SC fiber optic connectors in multimode and SC singlemode configurations. This allows it to connect up to ATM-622 (OC-12) networks using the existing connectors and fibers used in today's networking environments.

Product Outlook



065-1190
Multimode to Singlemode Converter
with ST and SC connector

Features

- Complies with SONET OC-3/12, and SDH STM-1/4 ATM-155/622 standard
- Supports: Multimode ST Connector
 Singlemode SC Connector
 Fiber 1300nm
- Extend fiber distance up to 50km per segment
- Compatible with other ATM-155/622 multimode and singlemode devices
- Status LEDs for power & link to easily monitor network activity
- External power supply
- FCC Class A & CE approved

Specifications

Standard:	SONET OC-3/12 SDH STM-1/4
Connector:	ST multimode & SC singlemode fiber optic
Max. Distance:	<u>ATM-155:</u> Multimode 2 km Singlemode 20 km <u>ATM-622:</u> Multimode 500 meters Singlemode 15 km
Unit LEDs:	<u>Power</u> - illuminated for normal operation
Port LEDs:	<u>Link</u> - illuminated when receiving link pulses from a compliant device
Power:	External power supply, 12 Volts DC at 0.8 Amp
Temperature:	<u>Operating</u> - 32 F to 158 F (0 C to 70 C) <u>Storage</u> - -4 F to 158 F (-20 C to 70 C)
Humidity:	<u>Operating</u> - 10% to 90% RH <u>Storage</u> - 5% to 90% RH
Emissions:	FCC Part 15 of Class A & CE Approval
Dimensions:	4.3 in. x 2.9 in. x 0.92 in., LxWxH (109.2 mm x 73.8 mm x 23.4 mm)

Package Contents

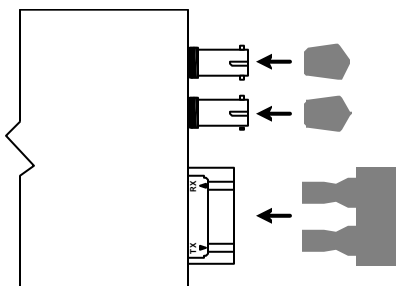
- One Converter
- One AC adapter
- Four Self-Adhesive feet
- This Operation Manual

INSTALLATION

To successfully install your converter, please refer to the following procedure:

ST/SC Connectors

These converters use industry standard SC or ST connectors. When you receive your converter you will see that the connectors are protected with a rubber cap (ST) or a rubber plug (SC). These ensure the connectors are kept clean and protected from outside environments.



The successful transfer of data can only be achieved with very clean and dust free connectors - use these protective covers at all times when the connectors are not connected to fiber.

To install ST connectors:

- Align the fiber cable connector' s locating pin with the ST connector' s slot on the top of the connector.
- Insert the connector until it seats fully.
- Push in the breech-lock bayonet connector and twist $\frac{1}{4}$ turn to lock the connector in place.

To install SC connectors:

- Align the fiber cable connector' s locating pin with the SC connector' s slot on the top of the connector.
- Insert the connector until it seats fully and clicks into place.
- The connector is now locked in place.

Please Note: The transmitter of the media converter (marked "Tx") must be connected to the receiver of the device at the other end of the fiber optic cable span (marked "Rx"), and the receiver of the media converter (marked "Rx") must be connected to the transmitter of the device at the other end of the fiber optic cable span (marked "Tx").

LED INDICATORS

This converter has several LEDs to enable you to determine the status of the converter and to also see what is happening across your network. They are as follows:

PWR

Power – Illuminated for normal operation.

LNK

Link - Illuminated when receiving link pulses from compliant devices

MOUNTING

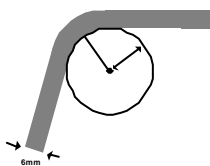
This converter can be placed in any location that will make its installation convenient. If you place the converter on a work surface or on top of existing networking equipment you may add four rubber feet included in the packaging.

This converter can also be mounted on a vertical surface. Just use the template opposite and mark the position of the holes. Simply use two screws and mount the converter in place.

Please exercise caution when using power tools. Also take care to install this unit away from damp or wet locations, or in close proximity to very hot surfaces. This will have a detrimental effect on the converter and cables. An ideal location is in a lightly cooled environment such as a typical equipment room.

CABLES

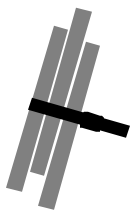
The following are some recommendations as to what you should and should not do when installing cables. Remember - cables are the deciding factor in deciding if a network performs to the maximum throughput.



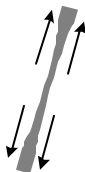
Try to maintain a bend radius of (min.) 4x the diameter of the cable for UTP and 100x for fiber.



Try not to allow the cable to twist too much - this creates a strain on the internal cables.



Place cable ties at regular intervals - do not over tighten cable ties - try to avoid using with fiber.



Do not stretch the cable especially on corners, in vertical cable trays and when spanning long distances.

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