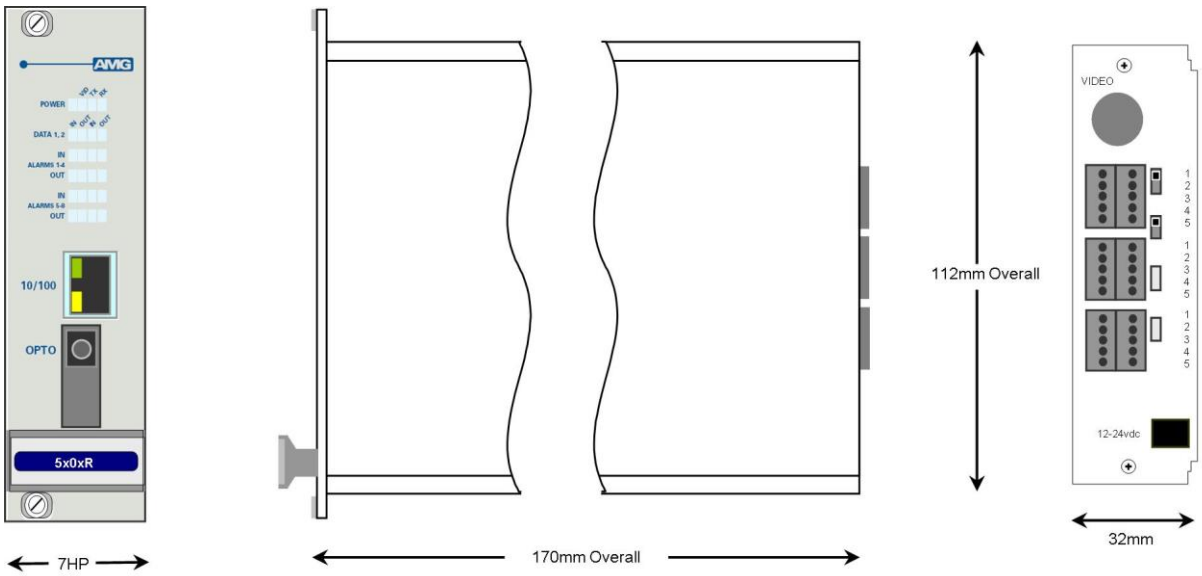
100BASE-TX Ethernet Media Converter Receive Unit for a Singlemode Fibre Link



The **AMG5902R** is a rackmount Ethernet Media Converter receive unit designed to provide 100BASE-TX full duplex Ethernet connectivity over one singlemode fibre.

The **AMG5902R** is designed to plug into an **AMG2009** or **AMG2015** subrack, which in turn fits into a 19" rack system.

The **AMG5902R** is designed to operate with an **AMG5901** standalone or **AMG5901R** rackmount Ethernet Media Converter transmit unit in a point to point configuration.

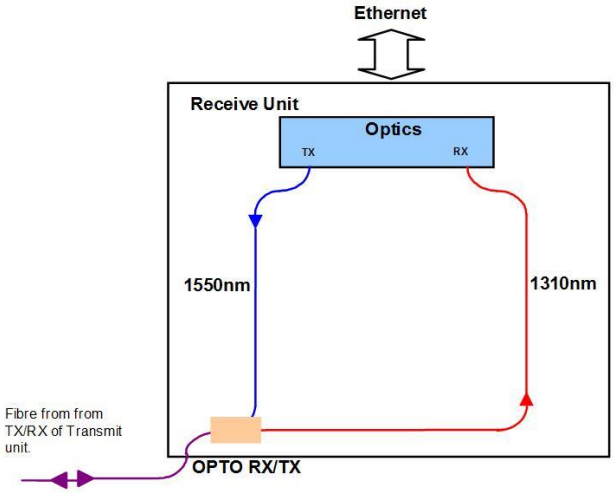
Contents

Introduction

Unit Functional Schematic

The **AMG5902R** transmits Ethernet data to the **AMG5901R** transmit unit.

It also receives Ethernet data transmitted from the **AMG5901R.**



Optical Connection

The **AMG5902** connections are illustrated in the following example which shows an **AMG5901R** rackmount Media Converter transmit unit together with an **AMG5902R** rackmount Media Converter receive unit configured as a point to point system.

Connections

Optical Connection Singlemode

Optical Fibre .....Singlemode
Connector .....SC/PC

Primary Optical Launch Power .....-10dBm
Transmit Wavelength.....1550nm

Primary Optical Sensitivity.....-30dBm
Receive Wavelength.....1310nm

Minimum Optical Dynamic Range .....20dB.

Power Connection

Power supply .....From plug in connection on the AMG2009 or AMG2015 subrack
Power consumption .....5 Watts max.

Ethernet Connection

Ethernet Data Connector RJ45
Interface.....Auto MDI/MDIX 100BASE-TX
Ethernet Data Rate .....Maximum 100Mb/s full duplex

Front Panel Indicators

Power LED

POWER	Green	-	Power is present
	Off	-	Power is not present
VIDEO	Off	-	Not used
OPTO TX	Green	-	Tx opto. present
	Off	-	Tx opto. is not present
OPTO RX	Green	-	Rx opto. sync.
	Off	-	Rx opto. is not sync.

Ethernet Data LEDs

Link not Present	Yellow	-	Link not present
	Off	-	Link is present
Link Integrity	Green	-	Link integrity is good, Idle state
	GBlink	-	Data transfer
	Off	-	Link not present

Ethernet Operation

The Ethernet interface supports "Auto-Negotiation" and will operate at either 10Mbits/s half duplex or 100Mbit/s full duplex. Data is transmitted from one port the other port with minimum delay or buffering.

The port also implements "Auto MDI/MDIX" i.e. it may be connected with aeither a straight-though or cross-over cable to an appropriate device such as external switch, PC or other DCE/DTE.

Two LED indicators are provided adjacent to the RJ-45 port: Green indicates Link / Data transfer and Yellow when in half-duplex mode.

Physical Information

Dimensions

Height ..... 3U Plug-in
Width 7HP
Depth ..... 170mm excluding connectors
Weight 750grams

Mounting Details

The unit is designed to be mounted within an AMG2009 or AMG2015 Subrack on standard card guides.

Safety

AMG Optical Fibre Products use Class 1 laser systems in accordance with EN 60825-2:2000.

It is always advisable to follow good practice when working with optical fibre systems. This includes:

- Do not stare with unprotected eyes or with any unapproved collimating device at fibre ends or connector faces, or point them at other people.
- Use only approved filtered or attenuating viewing aids

For other safety issues and advice on good practice associated with optical fibre systems, please see EN 60825-2:2000 or your local safety officer.

Maintenance and Repair

There are no user serviceable parts within AMG products. See unit data sheet for full specification. In case of problem or failure, please call your local support centre or contact: **AMG Systems Ltd.** at 3 The Omega Centre, Stratton Business Park, Biggleswade, Beds., SG18 8QB, UK.

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