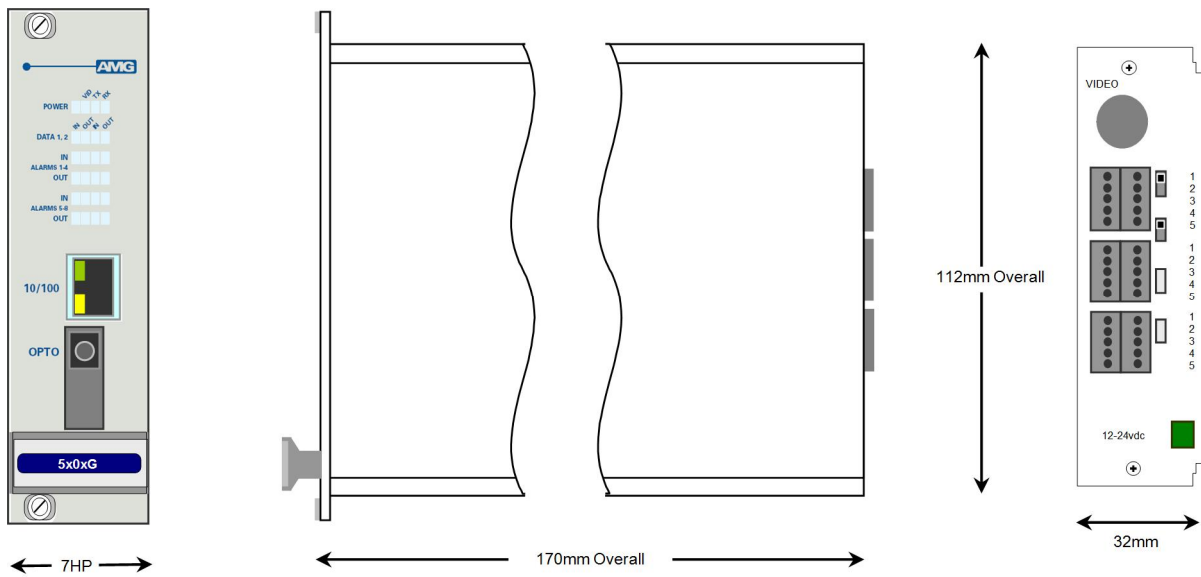


AMG5901HPG Instruction Manual

100BASE-TX Ethernet Media Converter Transmit Unit for a Singlemode Fibre Link with High Power Optical Transceivers



The **AMG5901HPG** is a rackmount Ethernet Media Converter transmit unit designed to provide 100BASE-TX full duplex Ethernet connectivity over one singlemode fibre. The HP suffix in the partno. indicates High Power optical transceivers.

The **AMG5901HPG** is designed to be powered using an **AMG2003** standalone or equivalent power supply. The G suffix in the partno. indicates a 3rd party subrack mounting configuration.

The **AMG5901HPG** is designed to operate with an **AMG5902HP** standalone or **AMG5902HPG** rackmount Ethernet data receive unit in a point to point configuration.

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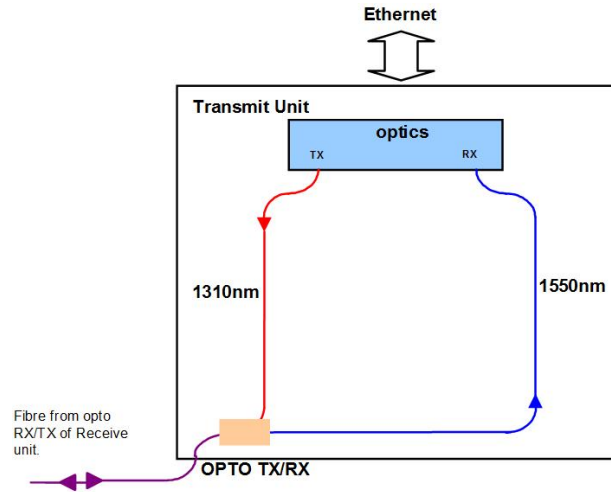
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Introduction

Unit Functional Schematic

The **AMG5901HPG** transmits Ethernet data to the **AMG5902HPG** receive unit.

It also receives Ethernet data transmitted from the **AMG5902HPG**.



Optical Connection

The **AMG5901HPG** connections are illustrated in the following example which shows an **AMG5901HPG** data transmit unit together with an **AMG5902HPG** rackmount data receive unit configured as a point to point system.



Connections

Optical Connection Singlemode

Optical Fibre Singlemode
Connector SC/PC

Primary Optical Launch Power 0dBm
Transmit Wavelength 1310nm

Primary Optical Sensitivity -34dBm
Receive Wavelength 1550nm

Minimum Optical Dynamic Range 34dB.

Power Connection

Connector Type Removable 2-pin, 3.81mm, Screw Terminal
Connector Partno. Phoenix 1803578
Supply Voltage +12 to +15 Volts DC
Maximum Power 5 Watts

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 100Mbit/s full duplex operation only. Data is transmitted from one port the other port with minimum delay or buffering.

The port implements "Auto MDI/MDIX" i.e. it may be connected with either a straight-through 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 indicates no Ethernet connection.

Physical Information

Dimensions

Height.....3U Plug-in
Width.....7HP
Depth170mm excluding connectors
Weight.....1000grams

Mounting Details

The unit is designed to be mounted within a non AMG 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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