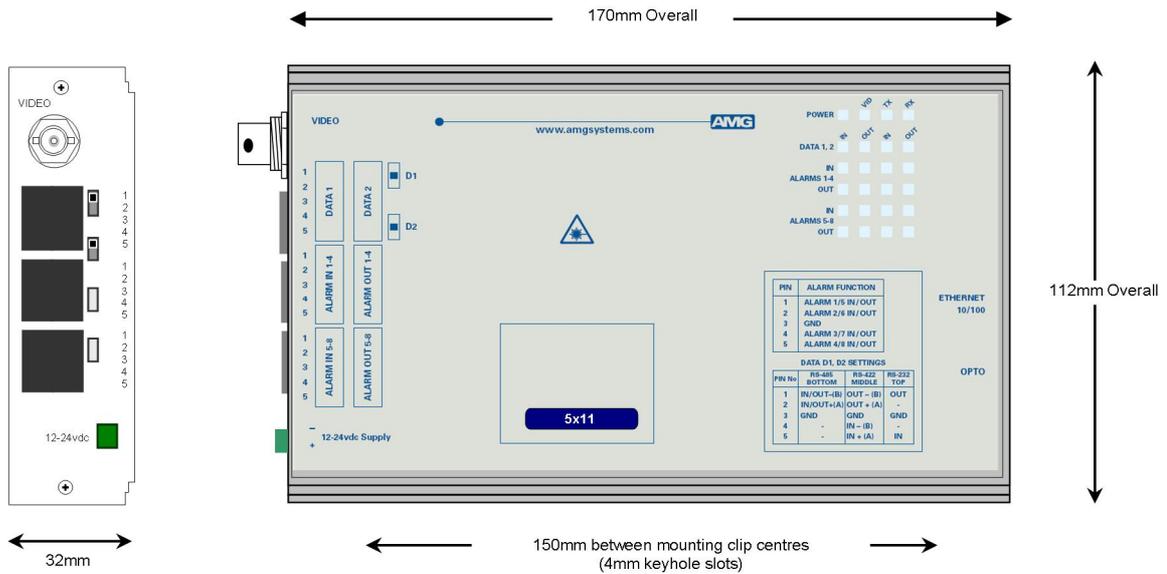




AMG5811 Instruction Manual

Single Channel Video Transmit Unit with Ethernet for a Multimode Fibre Link



The **AMG5811** is a standalone one channel video transmit unit designed to transmit 1 video signal and provide full duplex 100Base-T Ethernet connectivity over one Multimode optical fibre.

The **AMG5811** is designed to be powered using an **AMG2001** standalone power supply.

The **AMG5811** is designed to operate with an **AMG5812** or **AMG5812R** video receive unit in a point to point configuration. The R suffix in the partno. indicates a rackmount configuration.

Contents

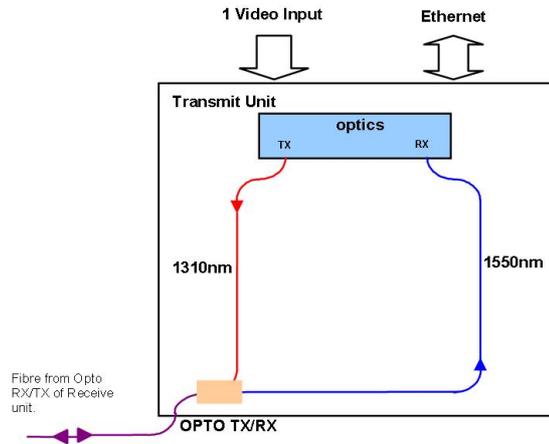
Introduction	3
Unit Functional Schematic.....	3
Optical Connection	3
Connections	4
Video Input Connection	4
Optical Connection Multimode.....	4
Power Connection	4
Ethernet Connection.....	4
Front Panel Indicators	5
Power LED.....	5
Ethernet Data LEDs.....	5
Ethernet Operation	6
Physical Information	7
Dimensions	7
Mounting Details.....	7
Safety	7
Maintenance and Repair	7

Introduction

Unit Functional Schematic

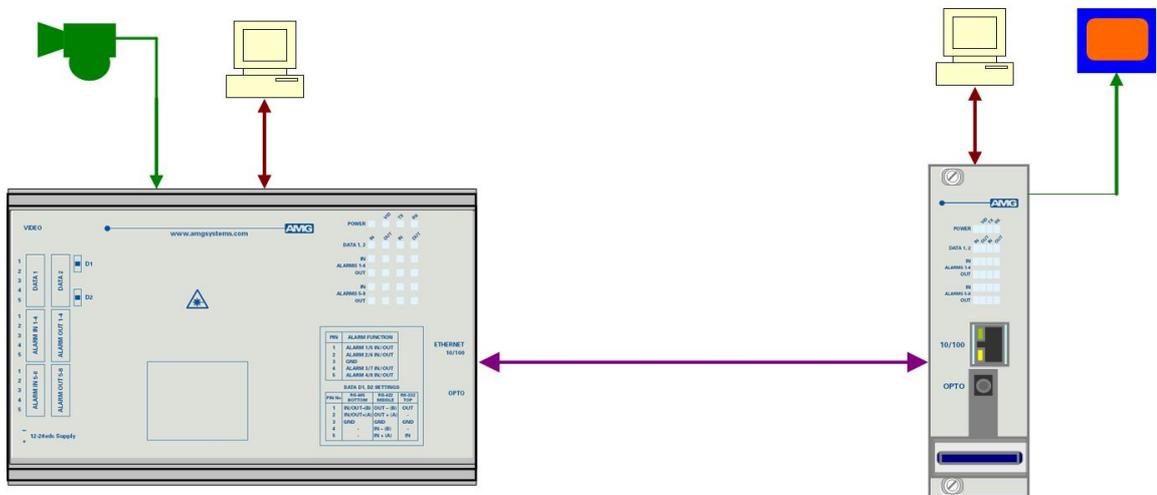
The **AMG5811** transmits 1 video channel to the **AMG5812** receive unit.

It also provides Ethernet connectivity with the **AMG5812**.



Optical Connection

The **AMG5811** connections are illustrated in the following example which shows an **AMG5811** transmit unit together with an **AMG5812** standalone receive unit configured as a single channel point to point system.



Connections

Video Input Connection

Connector75 ohm BNC Socket.
Input Impedance75 ohm terminated.
Input Level1 volt p-p nominal
Frequency Response.....10Hz to 7MHz.

Optical Connection Multimode

Optical FibreMultimode 50/125 or 62.5/125**
ConnectorSC/PC

Minimum Optical Launch Power-10dBm
Transmit Wavelength1310nm
Minimum Optical Sensitivity.....-30dBm
Receive Wavelength.....1550nm
Minimum Optical Dynamic Range20dB.

**Note: the transmission distance is limited by the bandwidth of the Multimode optical fibre. The optical data rate is 155Mbits/s, which may restrict operation to a maximum fibre length of 7km, although in most cases the units will operate successfully over longer fibre lengths. It is advisable however for distances greater than 7km, to have the optical fibre tested.

Power Connection

Connector TypeRemovable 2-pin, 3.81mm, Screw Terminal
Connector Partno.....Phoenix 1803578
Supply Voltage.....+12 to +15 Volts DC
Maximum Power2.5 Watts

Ethernet Connection

Ethernet Data ConnectorRJ45
InterfaceAuto-negotiation up to 100BASE-TX full duplex
Ethernet Data RateMaximum 100Mb/s total Ethernet traffic on fibre

Front Panel Indicators

Power LED

POWER	Green	-	Power is present
	Off	-	Power is not present
VIDEO	Green	-	Video input signal is present
	Off	-	Video input signal is not present
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 112mm
Width 170mm (excluding connectors)
Depth 35mm
Weight 200grams

Mounting Details

The AMG unit is supplied with a clip-on mounting bracket which should be attached to a panel or wall using 2 off 4.0mm screws, see diagram on page 1 for dimensions. The unit is clipped into the mounting bracket, and is then held firmly in position.

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.

Phone	+44 (0) 1767 600 777
Technical Support	+44 (0) 1767 604 491
Email	techsupport@amgsystems.com

This page is intentionally blank.