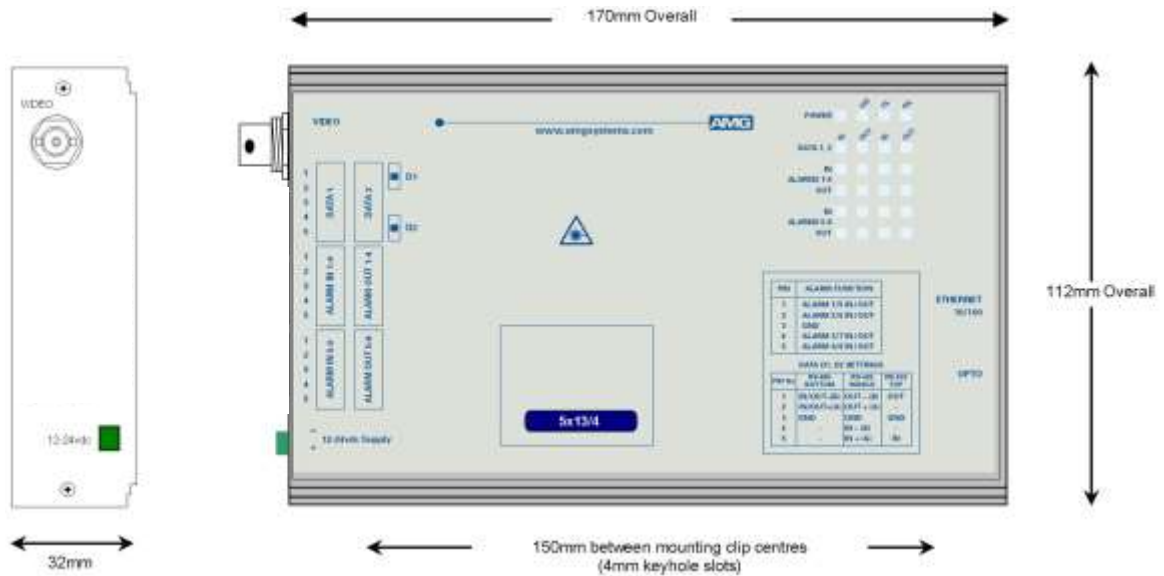




# AMG5911 Instruction Manual

## Single Channel Video Transmit Unit with Ethernet for a Singlemode Fibre Link



The **AMG5911** is a standalone one channel video transmit unit designed to transmit 1 video signal and also provides full duplex 100Base-T Ethernet connectivity over one Singlemode optical fibre.

The **AMG5911** is designed to be powered using an **AMG2001** standalone power supply.

The **AMG5911** is designed to operate with an **AMG5912** or **AMG5912R** video receive unit in a point to point configuration. The R suffix in the partno. indicates a rackmount configuration.

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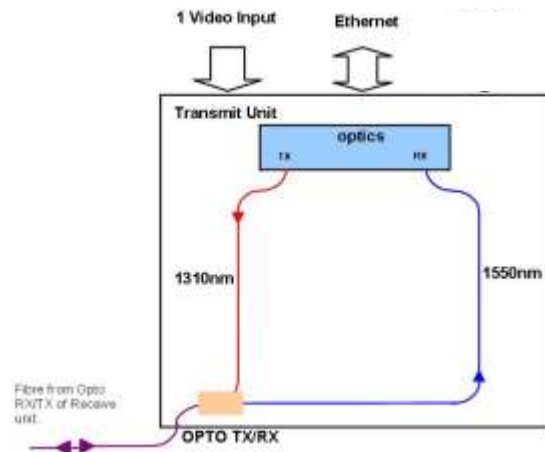
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## Introduction

### Unit Functional Schematic

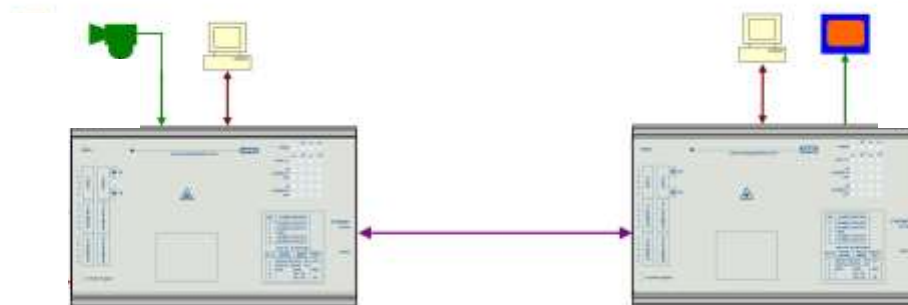
The **AMG5911** transmits 1 video to the **AMG5912** receive unit.

Ethernet connectivity is also provided between the two units.



### Optical Connection

The **AMG5911** connections are illustrated in the following example which shows an **AMG5911** transmit unit together with an **AMG5912** standalone receive unit configured as a single channel point to point system.



### 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.

## **Connections**

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### **Video Input Connection**

Connector .....75 ohm BNC Socket.  
Input Impedance .....75 ohm terminated.  
Input Level .....1 volt p-p nominal  
Frequency Response.....10Hz to 7MHz.

### **Optical Connection Singlemode**

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

Primary Optical Launch Power .....-10dBm  
Transmit Wavelength.....1310nm

Primary Optical Sensitivity .....-30dBm  
Receive Wavelength.....1550nm

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

### **Power Connection**

Connector Type .....Removable 2-pin, 3.81mm, Screw Terminal  
Connector Partno.....Phoenix 1803578  
Supply Voltage.....+12 to +15 Volts DC  
Maximum Power .....2.5 Watts

### **Ethernet Connection**

Ethernet Data Connector .....RJ45  
Interface .....Auto-negotiation up to 100BASE-TX full duplex  
Ethernet Data Rate .....Maximum 100Mb/s total Ethernet traffic on fibre

## Front Panel Indicators

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### 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

## **Physical Information**

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### **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**

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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**

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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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