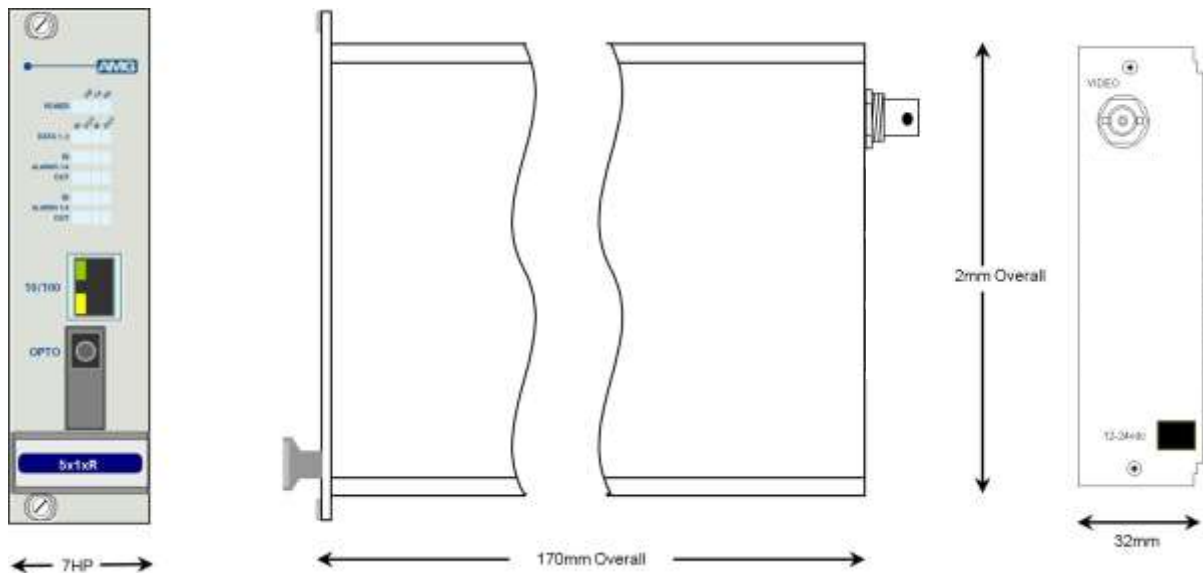


## Single Channel Video Receive Unit with Ethernet for a Singlemode Fibre Link



The **AMG5912R** is a rackmount one channel video receive unit designed to receive 1 video signal and also provides full duplex 100Base-T Ethernet connectivity over one Singlemode optical fibre.

The **AMG5912R** is designed to plug into an **AMG2009** or **AMG2015** subrack, which in turn fits into a 19" rack system.

The **AMG5912R** is designed to operate with an **AMG5911** or **AMG5911R** video transmit unit in a point to point configuration. The R suffix in the partno. indicates a rackmount configuration.

# Contents

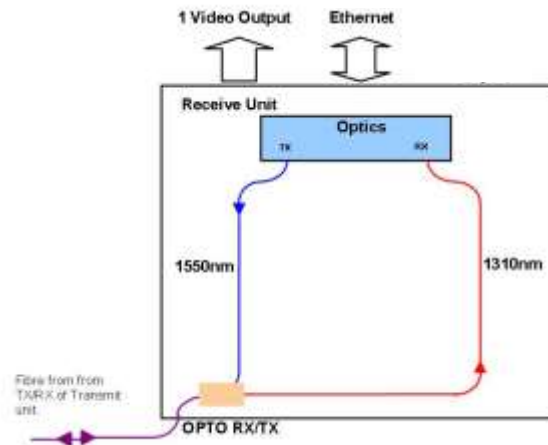
<b>Introduction</b>	<b>3</b>
Unit Functional Schematic.....	3
Optical Connection .....	3
Ethernet Operation .....	3
<b>Connections</b>	<b>4</b>
Video Output Connection .....	4
Optical Connection Singlemode .....	4
Power Connection .....	4
Ethernet Connection .....	4
<b>Front Panel Indicators</b>	<b>5</b>
Power LED.....	5
Ethernet Data LEDs.....	5
<b>Physical Information</b>	<b>6</b>
Dimensions .....	6
Mounting Details .....	6
<b>Safety</b>	<b>6</b>
<b>Maintenance and Repair</b>	<b>6</b>

## Introduction

### Unit Functional Schematic

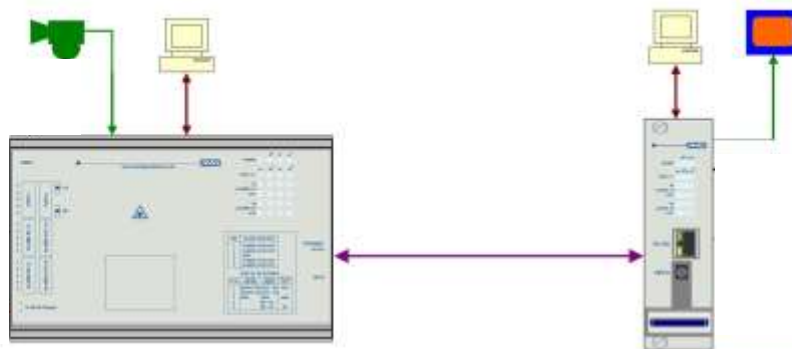
The **AMG5912R** receives 1 video from the **AMG5911** transmit unit.

Ethernet connectivity is also provided between the two units.



### Optical Connection

The **AMG5912R** connections are illustrated in the following example which shows an **AMG5911** single channel transmit unit together with a **AMG5912R** configured as a 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**

---

### **Video Output Connection**

Connector .....75 ohm BNC Socket.  
Output Impedance .....75 ohm terminated.  
Output 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.....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 .....2.5 Watts max.

### **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

---

### Power LED

POWER .....	Green	-	Power is present
	Off	-	Power is not present
VIDEO .....	Green	-	Video output 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**

---

### **Dimensions**

Height.....3U Plug-in  
Width.....7HP  
Depth .....170mm excluding connectors  
Weight.....200grams

### **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.

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

This page is intentionally blank.

This page is intentionally blank.