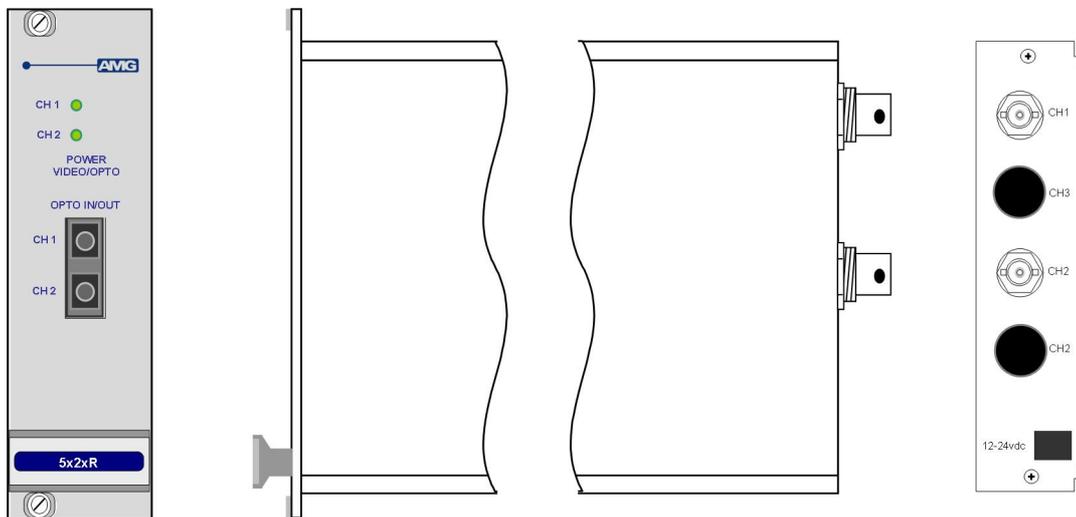# Dual System with 2x Independent Channels each of :

[Single Channel Video Transmit Unit for a Multimode Fibre Link]

The **AMG5621R** is a DUAL rackmount system which provides two independent channels, each designed to transmit one video signal over one Multimode optical fibre. i.e. a total of two optical fibres.

The **AMG5621R** is designed to plug into an **AMG2005** or **AMG2009** subrack, which in turn fits into a 19" rack system.

The **AMG5621R** is designed to operate with the **AMG5622** or **AMG5622R** rackmount dual channel video receive unit in a point to point configuration.

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Page 1 of 8

AMG5621R Instruction Sheet D17161-02.doc

Contents

Introduction

Unit Functional Schematic

The **AMG5621R** provides two independent, transmit channels.

Each channel transmits one video signal to one of two corresponding receive channels of an **AMG5622R** receive unit.

The schematic diagram shows one of the two available channels of the **AMG5621R**

1 Video Input

Transmit Unit

optics

TX

1310nm

Fibre to opto RX of Receive unit.

OPTO TX
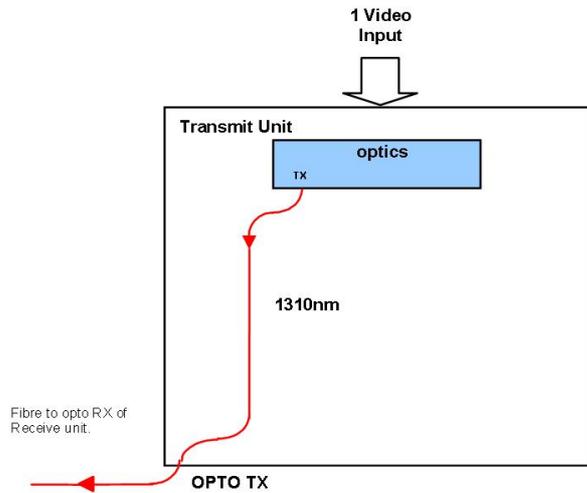
Optical Connection

The **AMG5621R** connections are illustrated in the following example which shows an **AMG5621R** transmit unit together with an **AMG5622R** two channel rackmount receive unit configured as a dual channel point to point system.

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Page 3 of 8

AMG5621R Instruction Sheet D17161-02.doc
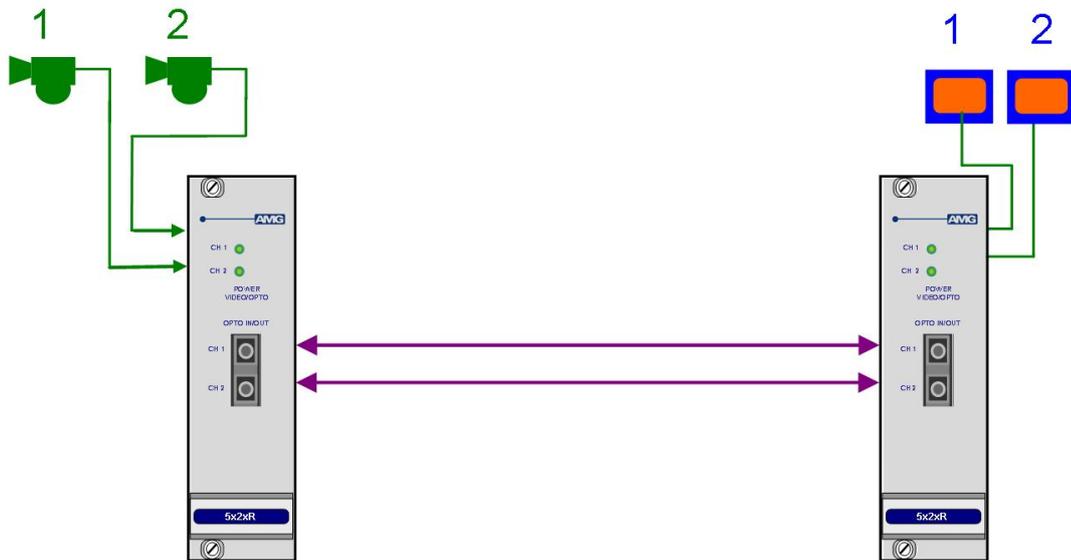
Connections

Video Output Connections

No. of channels ....2 independent video channels
Connectors ....75 ohm BNC Socket.
Input Impedance ....75 ohm terminated.
Input Level ....1 Volt p-p nominal
Frequency Response...........................10Hz to 7MHz.

Optical Connections

No. of Optical Connections ....1 per video channel
Minimum Optical Fibre........................Multimode 50/125 or 62.5/125**
Connector Type ....SC/PC

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

Optical Link Dynamic Range ....20dB.

**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

Power supply ....From plug in connection on the AMG2009 or AMG2015 subrack
Power consumption ....2.5 Watts max.

Front Panel Indicators

Power LED Video only

Power / Video / Opto...........................Green - Video input.
                                                     Red - Unit powered, no Video input.
                                                     Off - No power applied to unit

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Page 4 of 8

AMG5621R Instruction Sheet D17161-02.doc

Physical Information

Mounting Details

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

Dimensions

Height .... 3U Plug-in
Width 7HP
Depth .... 170mm excluding connectors
Weight 600grams

Removal / replacement from / to the Case

Note: - The AMG unit PCB is static sensitive. Handle with proper care and use normal electrostatic discharge (ESD) procedures. Use properly grounded protection (for example, wrist straps) when handling the PCB out of the case.

To remove the PCB from the case for example to access a Low Speed Data mode switch, remove the 2 fixing screws on the rear panel and slide the PCB sufficiently out of the case to enable access to the switch.

To replace the PCB into the case, slide the PCB gently into the case, if necessary aligning the board with the appropriate slots.

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

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Page 5 of 8

AMG5621R Instruction Sheet D17161-02.doc

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Page 6 of 8

AMG5621R Instruction Sheet D17161-02.doc

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AMG5621R Instruction Sheet D17161-02.doc

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Page 8 of 8

AMG5621R Instruction Sheet D17161-02.doc