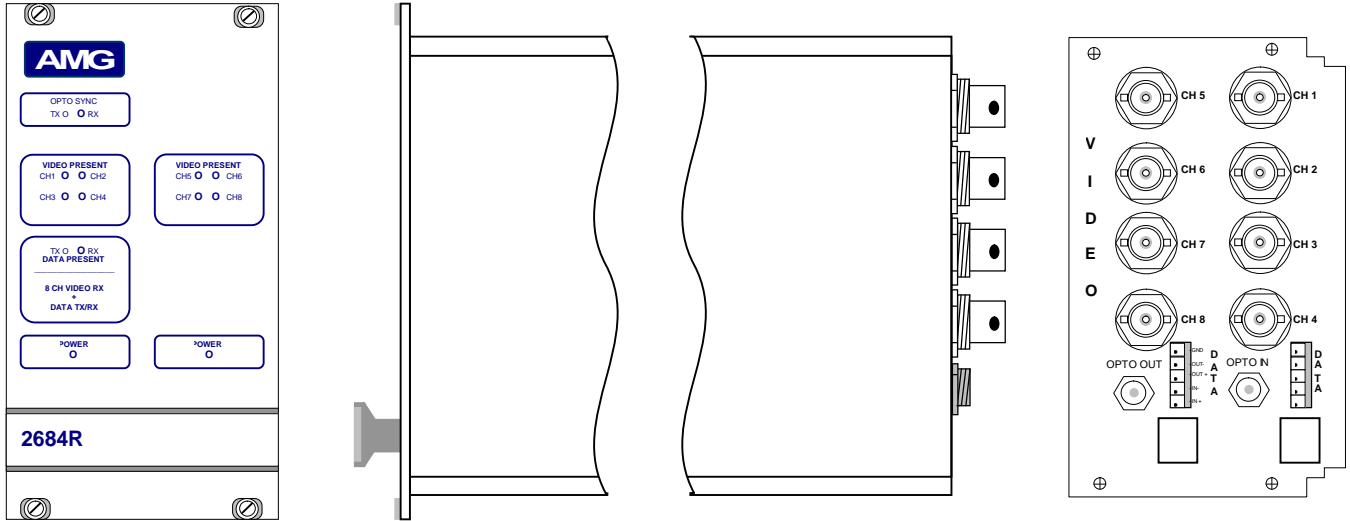




AMG2684R Instruction Manual

Eight Channel Video Receive Unit with Bi-directional Data



AMG2684R is an eight channel video receive unit designed to receive eight video signals and one bi-directional data channel over two multimode fibres. The **AMG2684R** is designed to plug into an **AMG2000** or an **AMG2005** Subrack which in turn fits into a 19" rack system.

The **AMG2684R** is designed to operate with **AMG2683R** eight channel video and data transmit unit.

Connections

Video Output Connections

- No of Channels 8
- Connectors 75 ohm BNC Socket.
- Output Impedance 75 ohm terminated.
- Output Level 1 volt p-p nominal
- Frequency Response 10Hz to 5.75MHz min.

Optical Connections

- OPTO OUT
- Connector ST
- Optical Receive Power 0 to -22dBm
- Wavelength 1310nm

Note: - The transmission distance on multimode fibre will tend to be limited by the bandwidth of the fibre rather than the optical dynamic range. It is recommended that 50/125 optical fibre is used as this will have a higher bandwidth than 62.5/125 fibre. The **AMG2683R** and **AMG2684R** will transmit and receive over a minimum of 1km of 50/125 fibre and will typically transmit and receive over 2km of 50/125.

Power Connection

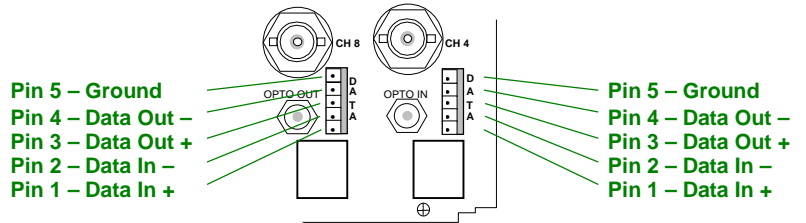
- Power supply from plug in connection on the **2000** or **2005** subrack
- Power consumption 20 Watts max.

Data Connections

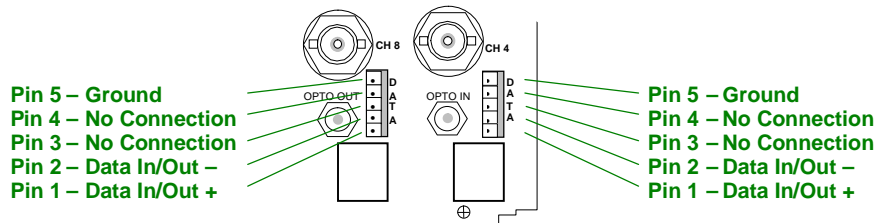
Data Connector 2off - 5 way removable spring terminal connector (2.5mm spacing)
 Manufacturers Part No. Phoenix/Combicom FK-MC-0.5/5-ST-2.5
 AMG Part No G15098-00

Data Channels 1 channel accessed from either data connector. Inputs from either connector are logically OR'ed together.

Connections RS422 4 wire See schematic



Connections RS485 4 wire See schematic



Protocol..... RS485 2wire (switch selectable SW2)
 RS422 4 wire Bus'ed or point to point (switch selectable SW2)
 See below for **Configuration of the RS485 / RS422 data channel** and description of tristate operation

Indicators

- Power..... Green - unit powered
 Off - no power applied to unit
- Opto Sync TX Green - Optical channel transmitting
 Off - Optical channel not transmitting
- Opto Sync RX Not used
- Video Present Green - video signal present on video the channel indicated.
- Data Present TX Green - logic one present on the data input
 Red - logic zero present on the data input
 Off - tri-state off or no connection on the data input

This represents the data signals being transmitted on the optical fibre

- Data Present RX..... Green - logic one present on the corresponding data output
 Red - logic zero present on the data output
 Off - tri-state off on the data output

This represents the data signals being received on the optical fibre

Physical Information

Dimensions

Height 3U Plug-in
Width..... 14HP
Depth 170mm excluding connectors
Weight..... 1000grams

Mounting Details

The unit is designed to be mounted within a **2000** or **2005** Subrack on standard card guides. Note the AMG standard racks are supplied with guide rails every 7HP. In order to fit this unit in the Subrack, 1 set of card guides have to be removed by pulling gently on the card guides.

The 2000 series Subrack is fitted with a 50 watt power supply. A maximum of 2 units may be fitted into one 2000 series Subrack.

The 2005 series Subrack is fitted with a 100 watt power supply. A maximum of 5 units may be fitted into one 2005 series Subrack.

Safety

The 2700 series of products uses a Class 1 laser system 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 the optical fibres systems see EN 60825-2:2000 or your local safety officer.

Maintenance and Repair

There are no user serviceable parts within the AMG2700 products.

In case of problem or failure contact your local support centre or AMG Systems Ltd, Technical Support Department on tel. +44 (0) 1767 600777.

See unit data sheet for full specification.