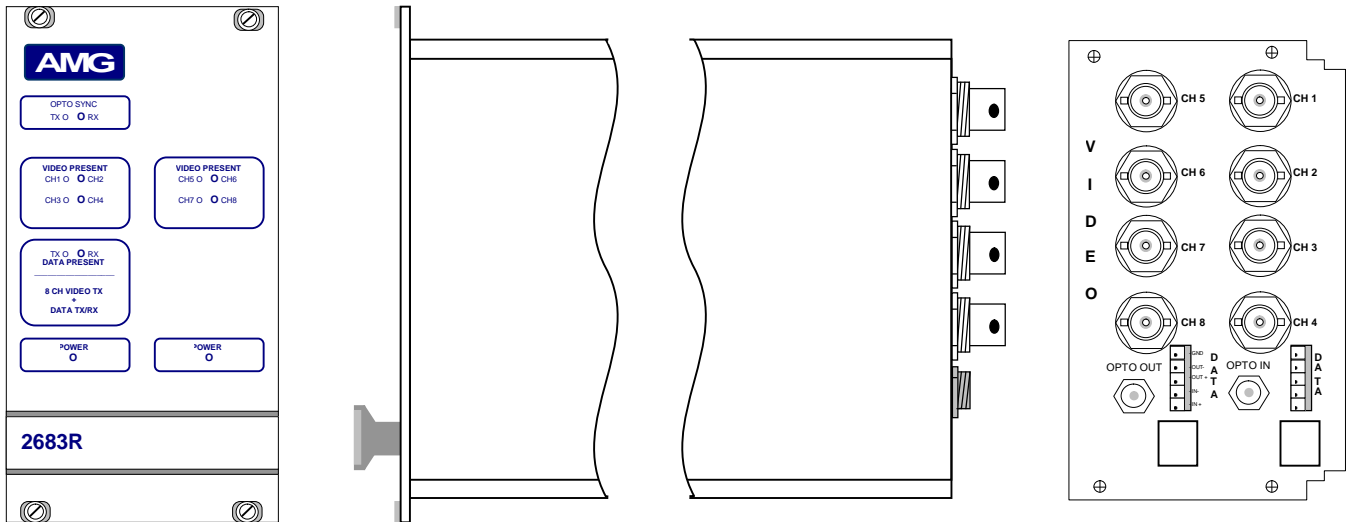




AMG2683R Instruction Manual

Eight Channel Video Transmit Unit with Bi-directional Data



AMG2683R is an eight channel video transmit unit designed to transmit eight video signals and one bi-directional data channel over two multimode fibres. The **AMG2683R** is designed to plug into an **AMG2000** or an **AMG2005** Subrack which in turn fits into a 19" rack system.

The **AMG2683R** is designed to operate with **AMG2684R** eight channel video and bi-directional data receive unit.

Connections

Video input Connections

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

Optical Connections

OPTO OUT

Connector	ST
Optical Launch Power	0 to -5dBm
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

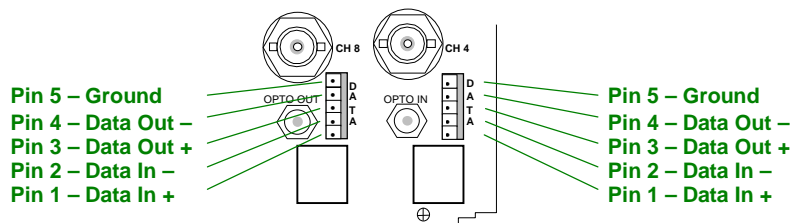
Power supply	from plug in connection on the 2000 or 2005 subrack
Power consumption	20 Watts max.

Data Connections

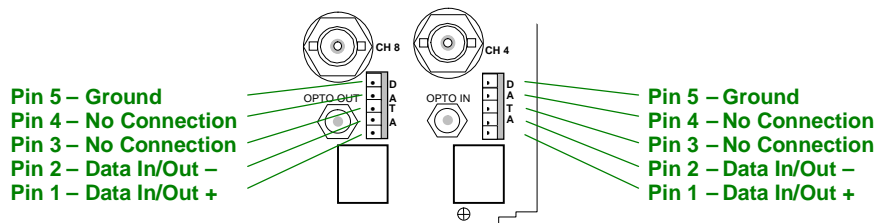
Data Connector 2off - 5 way removable spring terminal connector (2.5mm spacing)
 Manufacturers Part No. Phoenix/Combicom FK-MC-0.5/5-ST-2.5
 AMG Part No G15098-00

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.