







THE AMG6100 SERIES



Multi Channel Fibre Optic CCTV Transmission Solutions

The AMG6100 series brings together the benefits of the most sophisticated transmission technology used in high end transportation applications in a new low cost product range designed for the security market.



 Video 1x to 8x	 Data 232/422/485	 Contacts In/Out	 Audio In/Out	 Temp -15~+70°C	 Single-mode
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[AMG6100]

/ OVERVIEW

The product offers multi-channel drop and insert video transmission together with associated low speed data signals on one resilient singlemode fibre loop, utilising self-healing ring technology. In addition, LED diagnostics are inherent within each unit to enable easy identification of fault location from any position within the loop.

The video is transmitted in a real time full bandwidth digital format. This ensures high quality transmission regardless of distance. As no compression of the video is used, there is no latency or compromise on quality.

The unique drop and insert system provides for significant cost savings on the infrastructure, installation and maintenance without any increase in equipment cost. The system can be configured to collect individual, or multiple video signals e.g. around a site perimeter, a city centre or leisure facility in a 'daisy chain' and transmitting them all back to one or multiple control rooms or drop off sites.

This allows for significant savings on fibre optic infrastructure when compared with traditional methods of video collection i.e. single channel point to point transmission. Architectures can be configured as a 'spur' or a 'ring'.

/ FEATURES

- Real time digital transmission format – no signal quality degradation with distance
- Wide link dynamic range - no link margin adjustment required for installation, just plug in and switch on
- Flashing LED status indicators provides sophisticated fault diagnostics at a glance
- Single fibre loop or spur configurations
- 1, 2 and 4 channel video insert options available
- Plug in module for AMG2009 19" subracks - ability to mix with other products in the AMG range
- RS485/422/232 on board data channel options
- Standalone and rackmount formats for minimum space usage

/ OVERVIEW

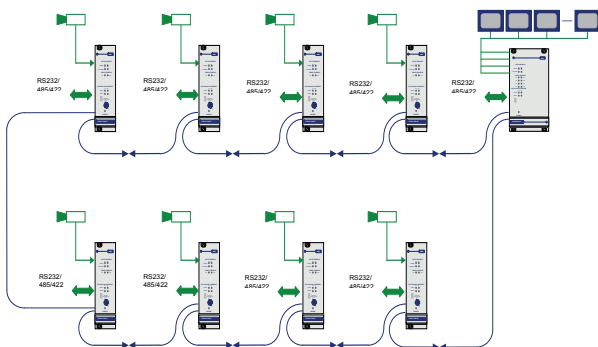
The inbuilt dual optical redundancy/self-healing ring topology ensures no loss of signal following a catastrophic fibre or node failure.

Please Note: The AMG dual optical redundancy does not utilise mechanical switches or couplers. Both transmission paths are continually monitored and will self-heal automatically when a fibre break is detected.

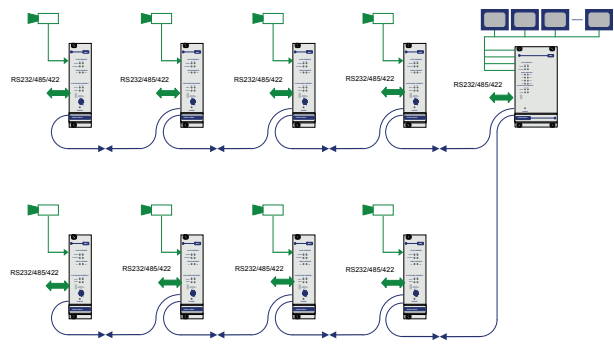
The product comes in 1, 2 and 4 channel insert options in both standalone and rackmount formats to ensure maximum system versatility. The AMG6100 series can be delivered with a dedicated Network Management System, NMS, providing alarms associated with the breaks in the optical fibre together with loss of video signals.

Example Topologies.

/ Eight Channel Drop & Insert Video + Data Dual Redundant/Self-Healing Loop



/ Eight Channel Drop & Insert Single Fibre Spurs



Specifications.

Video.

Video compression	None, un-compressed
Input/output level	1V pk to pk nominal
Input/output impedance	75Ω unbalanced
Frequency response	10Hz to 7.5MHz cut off
Differential gain	2%
Differential phase	2°
Signal to noise ratio	67dB, 10 bit conversion
Video standards	NTSC/PAL

Standard Data Channels.

Each link has one Data Channel which is switchable between RS232/422/485

Data Channel.

Available channels	1
Interface options, external switch	RS232, RS422, RS485
Connector	RJ45
Data rate	Up to 512kb/s

Optical.

Fibre Type	Singlemode
Wavelength	
Single fibre	1310nm/1550nm
Path loss	17dB min.
Transmission distance	> 40km
Connector	LC on rear panel

General.

Operating temp.	-15°C to +70°C
Operating humidity	0 to 95% non condensing
Video connector	BNC
Emissions	CE approved
Mechanical	3U high, 170mm deep 7/14 HP wide rackmount or standalone
Power requirements	+12V to +18V _{DC} @ 500mA
MTBF	> 180,000hrs
Indicators	Front panel LED status indicators

Part Numbers.

AMG6113-DR-SF	1 Channel Video Tx + RS232/422/485, Single Fibre, Singlemode, Standalone
AMG6123-DR-SF	2 Channel Video Tx + RS232/422/485, Single Fibre, Singlemode, Standalone
AMG6143-DR-SF	4 Channel Video Tx + RS232/422/485, Single Fibre, Singlemode, Standalone
AMG6184-DR-SF	8 Channel Video Rx + RS232/422/485, Single Fibre, Singlemode, Standalone
AMG6184R-DR-SF	8 Channel Video Rx + RS232/422/485, Single Fibre, Singlemode, Rackmount
AMG6184RN-DR-SF	8 Channel Video Rx + RS232/422/485, Single Fibre, Singlemode, Rackmount with Management Port

Recommended PSUs.

Standalone	AMG2003	15V _{DC} @ 2A standalone PSU. For Indoor use only.
Rackmount	AMG2015	19" Subrack, 12 Slot c/w PSU
	AMG2015-DR	19" Subrack, 12 Slot c/w dual PSU

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