AMG

The **Vision™** 5600 & 5700 Series

SINGLE CHANNEL FIBRE OPTIC CCTV TRANSMISSION SOLUTIONS

| SINGLE & MULTI MODE FIBRE | Video Point-to-Point | Up to 5* data channels | or alarm | DUAL OPTICAL REDUNDANCY OPTIONS |

Rackmount

Mini

Features

- Mini, standalone and rackmount formats for minimum space usage
- Removable screw or spring terminal data connectors
- AC or DC supply voltage is accepted by the "Mini" camera module
- Plug in module for the AMG2009 allowing the ability to mix with other products in the AMG range
- "Up the Coax" ** data transfer is built in to all video & data modules
- Multiple data options available via auxiliary data channels
- Up to 18 uni-directional contact closures available
- Dual redundant options available

The Vision 5600 and 5700 Series are designed for low cost, point-to-point single channel transmission of video and associated multiple low speed data/audio/alarm channels.

The Vision 5600 is designed for multimode fibre, whilst the 5700 is designed for singlemode fibre.

The system provides high quality, low cost transmission of uncompressed video signals. The video is transmitted in full bandwidth digital format ensuring optimum transmission performance regardless of distance. As no compression of the video is used, there is no latency or compromise on quality.

The range has built in AGC (automatic gain control) with a wide dynamic range and 10-bit digitisation to provide true 'plug & play' capability.

The products come in a variety of channel options in both standalone and rackmount formats to ensure maximum system versatility. Dual optical redundant options are also available.

Please Note: The AMG dual optical redundancy does not utilise mechanical switches or couplers, and both transmission paths are continually monitored.

The new data expansion cards offer transmission of up to 4 additional data channels or 18* uni-directional contact closure channels per video channel.
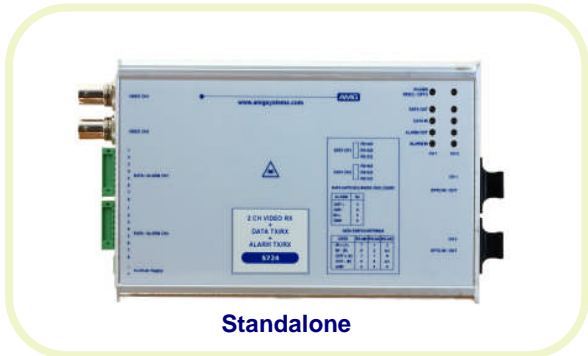
Data only transmission units are also available.

* 4 uni-directional contact closures utilises 1 data channel.
** For "up the coax" data check with AMG to confirm compatibility.

Applications

- Security and surveillance
- Industrial sites
- Campus sites
- Personal help points
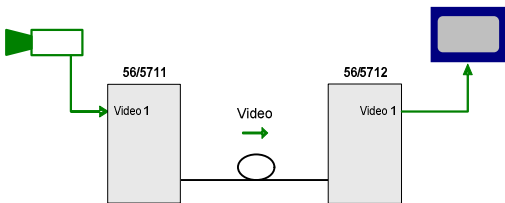- ITS and Border Control
- Oil and Gas

Standalone

Vision 5600 & 5700
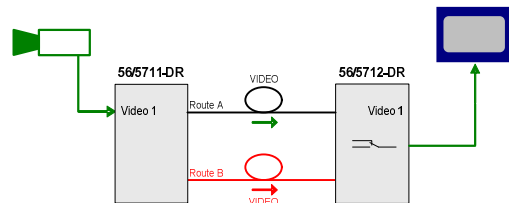
* 57xx = Singlemode, 56xx = Multimode

System Topologies

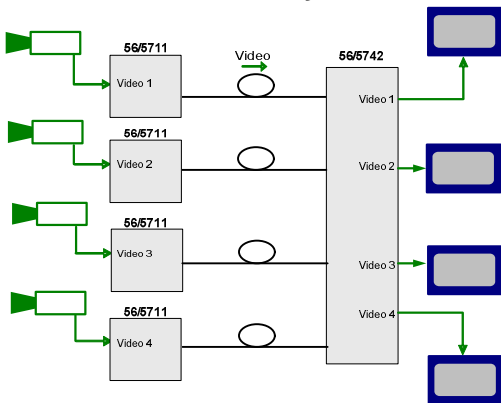### Single Channel Video Only

56/5711 — Video 1
Video
56/5712 — Video 1

Single channel uni-directional video inserted onto one fibre, with a single channel receiver.
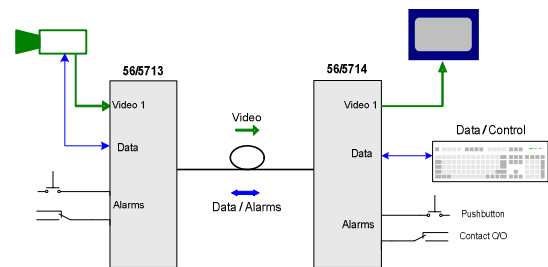
Dual Redundant Single Channel Video

56/5711-DR — Video 1
Route A — VIDEO
Route B — VIDEO
56/5712-DR — Video 1

Single channel uni-directional video inserted onto two fibres, with auto dual redundant single channel
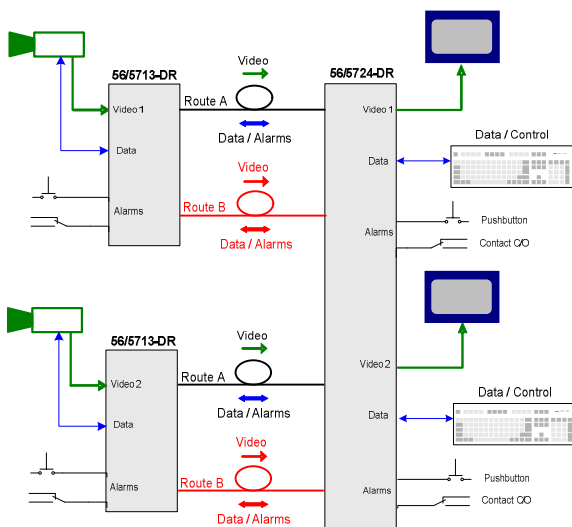
Quad Channel Video Only

56/5711 — Video 1
56/5711 — Video 2
56/5711 — Video 3
56/5711 — Video 4
Video
56/5742 — Video 1 / Video 2 / Video 3 / Video 4

Four single channel uni-directional video inserted onto separate fibres, with a quad receiver.

Single Channel Video + Data + Alarm

56/5713 — Video 1 / Data / Alarms
Video
Data / Alarms
56/5714 — Video 1 / Data / Alarms
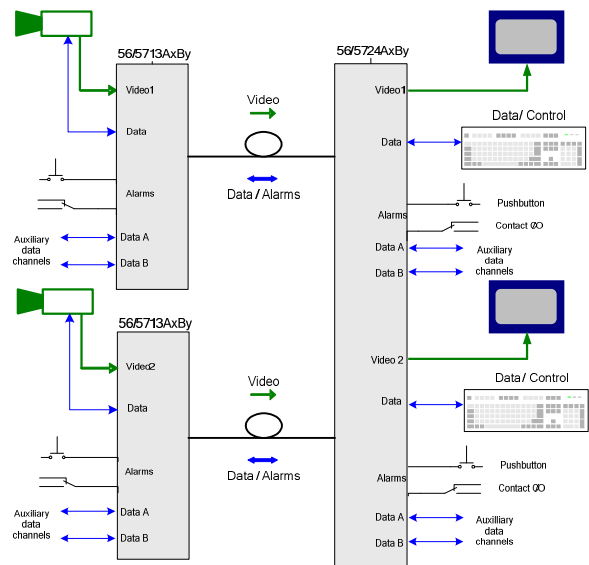Data / Control
Pushbutton
Contact O/O

Single channel uni-directional video inserted onto one fibre, with bi-directional data / alarm.

Dual Redundant [Dual Channel Video & Dual Data + Alarms]

56/5713-DR — Video 1 / Data / Alarms
Route A — Video / Data / Alarms
Route B — Video / Data / Alarms
56/5724-DR — Video 1 / Data / Alarms
Data / Control
Pushbutton
Contact O/O

56/5713-DR — Video 2 / Data / Alarms
Route A — Video / Data / Alarms
Route B — Video / Data / Alarms
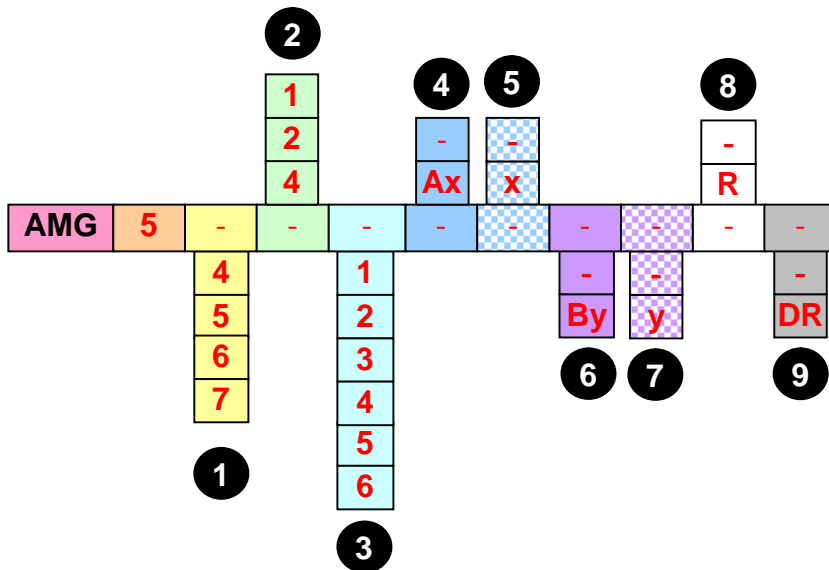Video 2 / Data / Alarms
Data / Control
Pushbutton
Contact O/O

Dual channel uni-directional video with bi-directional data / alarm inserted onto two pairs of fibres which feed into a dual redundant dual receiver.

Dual Channel Video & Dual Data + Alarm + Data Expansion Cards

56/5713AxBy — Video1 / Data / Alarms / Data A / Data B
Auxiliary data channels
Video
Data / Alarms
56/5724AxBy — Video1 / Data / Alarms / Data A / Data B
Data / Control
Pushbutton
Contact O/O
Auxiliary data channels

56/5713AxBy — Video2 / Data / Alarms / Data A / Data B
Auxiliary data channels
Video
Data / Alarms
Video 2 / Data / Alarms / Data A / Data B
Data / Control
Pushbutton
Contact O/O
Auxiliary data channels

Dual channel uni-directional video with bi-directional data / alarm, and 2 auxiliary channels, inserted onto separate fibres which feed into a dual receiver. Auxiliary data channel format can be any from RS-232, RS-422/485, TTL, 20mA, Audio, or 4 contact-closure channels (in or out).

AMG

Vision 5600 & 5700
Model Number Builder

TABLE 1	
	Auxiliary Data Channels A & B
X or Y**	**Interface**
1	RS422/485
2	RS232
3	20mA
4	TTL
5	Contact Closure
6	Echelon FTT10A
7	4 Ch. Contact IN
8	4 Ch. Contact Out
9	Audio

** Note: *always place lowest value in Auxiliary Data Channel A*

1 – With or without Video and Optical Fibre Size
4	-	Without Video - Multimode
5	-	Without Video - Singlemode
6	-	With Video - Multimode
7	-	With Video - Singlemode

2 – Number of Fibre Channels
video(if present) and data (if present)
1	-	Single Channel
2	-	Dual Channel
4	-	Quad Channel – available only for video only (564x, 574x)

3 – Video TX or RX and Data Channel Configurations
Links need to supplied in pairs i.e. 5xx1 with 5xx2, 5xx3 with 5xx4 and 5xx5 with 5xx6
1	-	Video Only TX (56xx & 57xx only)
2	-	Video Only RX (56xx & 57xx only)
3	-	Video TX (56xx & 57xx only) + Data TX/RX (RS232/422/485) + Alarms IN/OUT
5	-	Video TX (56xx & 57xx only) + Data TX/RX (RS232/422/485) + 2 off Alarms IN
6	-	Video RX (56xx & 57xx only) + Data TX/RX (RS232/422/485) + 2 off Alarms OUT

4 – Auxiliary Data Channel A
Only Applicable to 5xx3, 5xx4, 5xx5, 5xx6. For dual video channel units both Additional Data Channels A are of the same type.
No '**Ax**'	-	No auxiliary Data Channel A
Ax	-	Auxiliary Data Channel A – replace 'x' with required type as per Table 1

5 – Second Auxiliary Data Channel A
Only Applicable to 5x13, 5x14, 5x15, 5x16. Both Additional Data Channels A are of the same type.
x	-	Second Auxiliary Data Channel A – replace 'x' with required type as per Table 1

7 – Auxiliary Data Channel B
Only Applicable to 5xx3, 5xx4, 5xx5, 5xx6. For dual video channel units both Additional Data Channels B are of the same type.
No '**By**'	-	No auxiliary Data Channel B
By	-	Auxiliary Data Channel B – replace 'y' with required type as per Table 1, always place lowest value in Auxiliary Data Channel A

8 – Second Auxiliary Data Channel B
Only Applicable to 5x13, 5x14, 5x15, 5x16. Both Additional Data Channels B are of the same type.
y	-	Second Auxiliary Data Channel B – replace 'y' with required type as per Table 1

9 – Physical Format
No '**R**'	-	Standalone
R	-	Rackmount

10 – Dual Redundant
Contact AMG for Dual Redundant Options.
DR	-	Dual optical redundant.
No 'DR'	-	No dual optical redundancy

Note : "Mini" module physical format is only available for 5x11, 5x13, and 5x15 units only, without auxiliary data channels.

Part No. Examples

AMG5715A7	Standalone 1 Channel Video TX + Bi-directional RS-485 / 422 / 232 + 6 off Contact Closure Inputs using one single mode fibre.
AMG5726A8R	Rackmount Dual [1 Channel Video RX + Bi-directional RS485/422/232 + 6 off Contact Closure Outputs] designed to connect to two 5715A7's using two singlemode fibres.
AMG5713A7B9	Standalone 1 Channel Video TX + Bi-directional RS485/422/232 + Bi-directional Contact Closure + 4 off Contact Closure Inputs on auxiliary channel A + bi-directional audio on auxiliary channel B using one single mode fibre.
AMG5724A8B9R	Dual Rackmount 1 Channel Video RX + Bi-directional RS485/422/232 + Bi-directional Contact Closure + 4 off Contact Closure Outputs on auxiliary channel A + bi-directional audio on auxiliary channel B using one single mode fibre. Designed to connect to two 5713A9B7 using one singlemode fibres for each link.
AMG5713A77B77-DR	Standalone 1 Channel Video TX + Bi-directional RS485/422/232 + Bi-directional Contact Closure + 4 off Contact Closure Inputs on auxiliary channel A, 4 off Contact Closure Inputs on second auxiliary channel A, 4 off Contact Closure Inputs on auxiliary channel B, 4 off Contact Closure Inputs on second auxiliary channel B + dual redundancy on 2 singlemode fibres.

Specifications

Video

Compression	None, uncompressed
Input / output level	1V p/p, +3dB
Input / output impedance	75Ω unbalanced
Frequency Response	10Hz to 7.0MHz
Differential Gain	1%
Differential Phase	1°
Signal to Noise Ratio	67dB minimum
Video Connector	BNC
Video Standard	NTSC/PAL/SECAM
Video Sample Rate	28MHz

Data

Data rate	Maximum 512kb/s
Interface options	RS-482 / RS-422 / RS-232
Data connector	Removable screw/spring terminal
Up the Coax	Pelco / Panasonic

Alarms

Input level	330Ω pull-up to +3V3
Output current	150mA
Output voltage	125Vac/dc

Optical

Wavelength	1310 / 1550 nm
Fibre	Singlemode or Multimode
Optical connector type	SC-PC
Path loss	19dB
Path loss HP version	34dB

General

Operating Temperature	-40°C to +74°C
Operating humidity	0 to 95% non-condensing
Indicators	Front panel LED
EMC	CE approved
MTBF	>250,000hrs

Power requirements

Voltage	
Mini	+12V to +24V ac/dc
Rack	+12Vdc to +24Vdc
Stand alone	+12Vdc to +24Vdc
Power	
Single	2.0W
Dual	3.0W
Quad	3.5W

Mechanical

Weight	
Mini	150g
Standalone	500g
Rackmount	550g
Dimensions	
Mini	55 x 55 x 26mm
Standalone	110 x 172 x 35mm
Rackmount	3U x 7HP x 172mm

AUXILIARY DATA CHANNELS

Audio

Input level	0dBm
Input overload level	+6dBm
Input impedance	10kΩ / 600Ω
Output impedance	600Ω
Frequency response	10Hz to 20KHz

Contact Closure

Input circuit	1kΩ pull-up to +3V3
Output	
Interface*	NPN, open collector
Current sink	50mA
Voltage maximum	+24Vdc

* Note : AC / high voltage / current output version available, please contact AMG for details

Data

Interface options	RS-232, RS-422/485, TTL, 20mA
Lonworks option	Echelon FTT10A
Data Rate	Maximum 115kb/s

POWER SUPPLIES AND SUBRACKS

System 2009 rackmount chassis & power supply

2009	19" mount subrack - 10 Slot
BP2000	Blank panel (7 hp) - 1 Slot

Standalone power supply

PS2001	Power supply +15V DC @ 300mA

AMG Systems Limited reserves the right to change the specification without notice. The information herein is believed to be reliable and accurate, however no responsibility is assumed by AMG Systems Limited for its use.

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