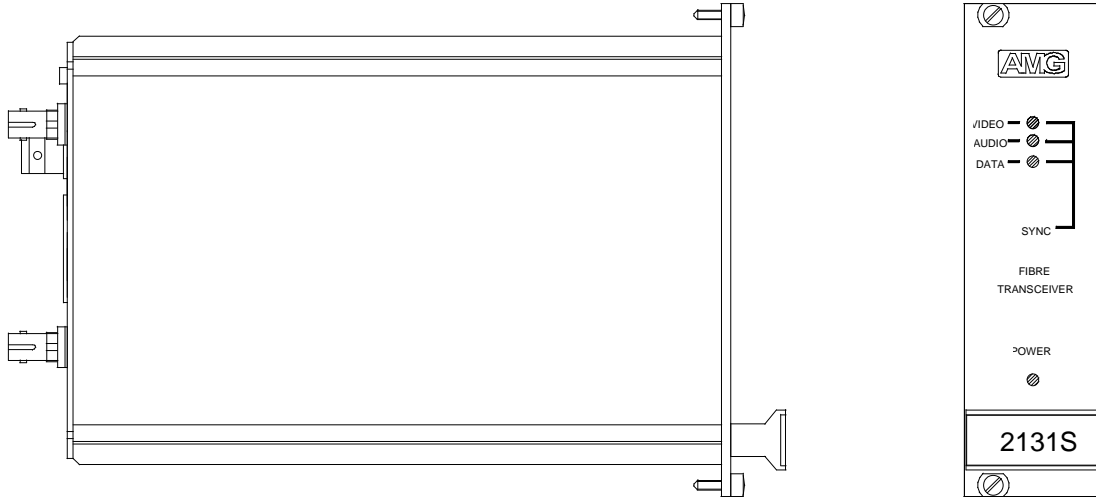




AMG2131S (Lonworks) Instruction Sheet

AMG2131S Single Fibre Rackmount Video Rx + Bi-directional Audio & Data RS485 (Lonworks)



Video Connection

Connectors 75 ohm BNC Socket.
Output Impedance 75 ohm terminated.
Output Level 1 volt p-p nominal.
Frequency Response 10Hz to 6MHz min.

Optical Connection

Connectors ST Style (1 off)
Opto In Receiver Sensitivity
 High Gain -17dBm to -30dBm nominal.
 Low Gain -9dBm to -22dBm nominal.
 (Unless otherwise specified units will be shipped in the low gain range)
 (for adjustment see below)
Wavelength 850/1300nm (Single Fibre) nominal.

Data Connection

Connector Push-in connector strip - 11way
(Solid conductors 0.5mm² (20 awg) can be connected by simply push fitting into the appropriate connection hole. Smaller conductors and wires (up to 0.5mm², 20 awg) are inserted into the connection space whilst depressing the orange lever. Wire or conductors should be stripped back to a length of 11mm. Use a small screwdriver to depress the orange lever to release the connection.)

Pinout See Below – Note Pins number from the bottom of the unit

| Pin No. | Function |
|-----------------------|---|
| 1(bottom) | Audio Input |
| 2 | Audio Ground |
| 3 | Audio Output (+) |
| 4 | Audio Output (-) |
| 5 | Power Ground |
| 6 | Auxiliary Power Input (+15v to +18v dc) |
| Data Interface | RS485 (2 wire) |
| 7 | Data Ground |
| 8 | Data I/O (A) |
| 9 | Data I/O (B) |
| 10 | Data I/O (A) |
| 11 | Data I/O (B) |

Dimensions

Height 3U
 Width 7HP
 Depth 205mm

Mounting Details

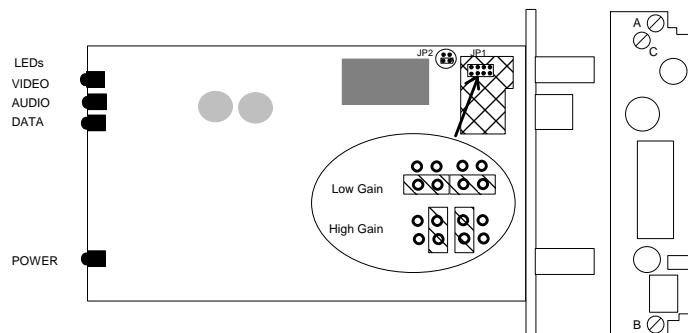
The AMG2131S plugs into and is powered from the AMG2000 Subrack

Indicators

Power Green – lit when unit powered
 Video Sync Green – lit when video signal present on optical input.
 Audio Sync Green – lit when audio channel present.
 (Note: this does not indicate the presence of actual audio)
 Data Sync Green – lit when data channel present.
 (Note: this does not indicate the presence of actual data)

Gain Range Setting

If required the receiver gain range can be adjusted by changing jumper positions on the PCB. The high gain setting is for long distances over small fibres, and the low gain setting for larger diameter fibres over short distances. Units are shipped in the low gain setting unless otherwise instructed. The circuit board assembly is removed by removing screws A and B on the rear panel of the plug-in and sliding the assembly out of the case. Screw C should not be removed under any circumstances. See above for typical power levels for each range.



RS485 2 wire – The RS485 interface is normally in held in the receive state. The data out transmitter is controlled by the presence of data coming in from the optical fibre. The transmitter is normally off. Incoming data on the optical fibre will turn on the transmitter and it will be held on until all the data has been transmitted. When the transmitter is enabled the receiver is disabled. The delay between the end of the data transmission and the transmitter being disabled is 5us. The input is set to high impedance.