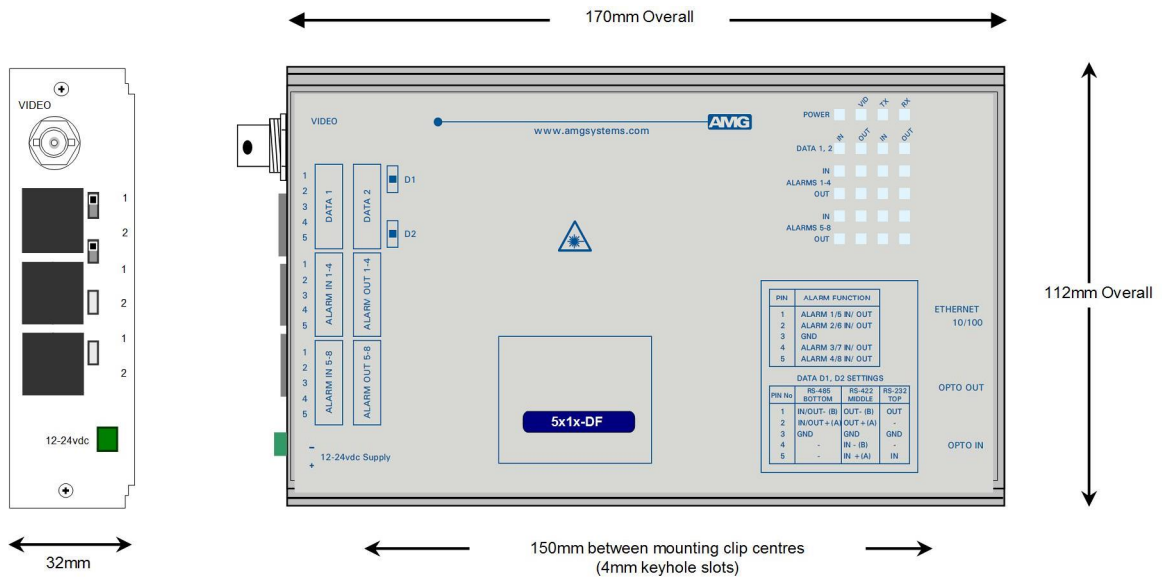




AMG5811-DF Instruction Manual

Single Channel Video Transmit Unit with Ethernet for a Multimode Dual Fibre Link



The **AMG5811-DF** is a standalone one channel video transmit unit designed to transmit 1 video signal and provide full duplex 100Base-T Ethernet connectivity over two Multimode optical fibres.

The **AMG5811-DF** is designed to be powered using an **AMG2001** standalone power supply.

The **AMG5811-DF** is designed to operate with an **AMG5812-DF** or **AMG5812R-DF** video receive unit in a point to point configuration. The R suffix in the partno. indicates a rackmount configuration.

Contents

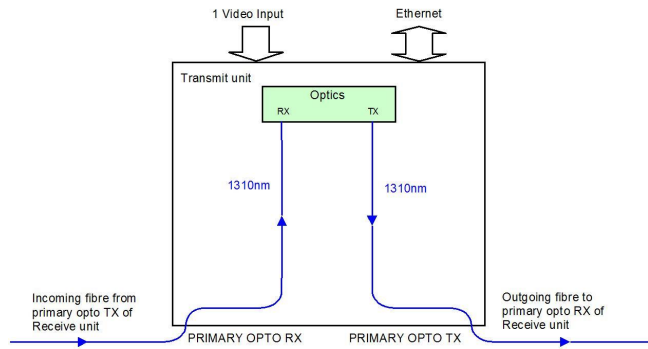
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Introduction

Unit Functional Schematic

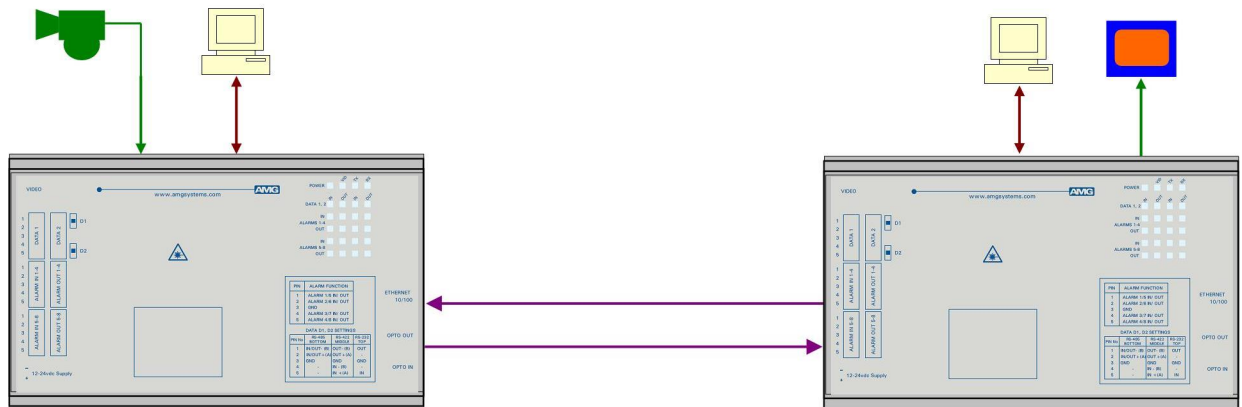
The **AMG5811-DF** transmits 1 video channel to the **AMG5812-DF** receive unit.

It also provides Ethernet connectivity with the **AMG5812-DF**.



Optical Connection

The **AMG5811-DF** connections are illustrated in the following example which shows an **AMG5811-DF** transmit unit together with an **AMG5812-DF** standalone receive unit configured as a single channel point to point system.



Connections

Video Input Connection

Connector 75 ohm BNC Socket.
Input Impedance 75 ohm terminated.
Input Level 1 volt p-p nominal
Frequency Response 10Hz to 7MHz.

Optical Connection Multimode

Optical Fibres Multimode 50/125 or 62.5/125**
Connectors SC/PC

Minimum Optical Launch Power -15dBm
Transmit Wavelength 1310nm
Minimum Optical Sensitivity -34dBm
Receive Wavelength 1310nm
Minimum Optical Dynamic Range 19dB.

**Note : the maximum transmission distance is 2km. This is limited by the bandwidth of the Multimode optical fibres.

Power Connection

Connector Type Removable 2-pin, 3.81mm, Screw Terminal
Connector Partno..... Phoenix 1803578
Supply Voltage..... +12 to +15 Volts DC
Maximum Power 2.5 Watts

Ethernet Connection

Ethernet Data Connector RJ45
Interface Auto-negotiation up to 100BASE-TX full duplex
Ethernet Data Rate Maximum 100Mb/s total Ethernet traffic on fibre

Front Panel Indicators

Power LED

POWER.....	Green	-	Power is present
	Off	-	Power is not present
VIDEO	Green	-	Video input signal is present
	Off	-	Video input signal is not present
OPTO TX.....	Green	-	Tx opto. present
	Off	-	Tx opto. is not present
OPTO RX	Green	-	Rx opto. sync.
	Off	-	Rx opto. is not sync.

Ethernet Data LEDs

Link not Present	Yellow	-	Link not present
	Off	-	Link is present
Link Integrity	Green	-	Link integrity is good, Idle state
	GBlink	-	Data transfer
	Off	-	Link not present

Ethernet Operation

The Ethernet interface supports "Auto-Negotiation" and will operate at either 10Mbps/s half duplex or 100Mbit/s full duplex. Data is transmitted from one port the other port with minimum delay or buffering.

The port also implements "Auto MDI/MDIX" i.e. it may be connected with aeither a straight-though or cross-over cable to an appropriate device such as external switch, PC or other DCE/DTE.

Two LED indicators are provided adjacent to the RJ-45 port: Green indicates Link / Data transfer and Yellow when in half-duplex mode.

Physical Information

Dimensions

Height..... 112mm
Width..... 170mm (excluding connectors)
Depth..... 35mm
Weight..... 200grams

Mounting Details

The AMG unit is supplied with a clip-on mounting bracket which should be attached to a panel or wall using 2 off 4.0mm screws, see diagram on page 1 for dimensions. The unit is clipped into the mounting bracket, and is then held firmly in position.

Safety

AMG Optical Fibre Products use Class 1 laser systems 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 optical fibre systems, please see EN 60825-2:2000 or your local safety officer.

Maintenance and Repair

There are no user serviceable parts within AMG products. See unit data sheet for full specification. In case of problem or failure, please call your local support centre or contact: **AMG Systems Ltd.** at 3 The Omega Centre, Stratton Business Park, Biggleswade, Beds., SG18 8QB, UK.

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