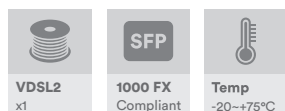


# AMGSFP-VDSL2 INDUSTRIAL GIGABIT ETHERNET HIGH SPEED VDSL2 SFP MODULES



## Industrial Ethernet Solutions

AMG's industrial high-speed VDSL2 Ethernet Extender SFP's provide transmission of high-speed Ethernet data over legacy cabling infrastructure including UTP, Coax, Alarm, Bell or Telephone cables.



VDSL2  
x1

1000 FX  
Compliant

Temp  
-20~+75°C

[ AMGSFP-VDSL2 Series ]

### / OVERVIEW

The AMGSFP-VDSL2 series are industrial high speed Gigabit Ethernet VDSL2 SFP extenders that support an aggregated bandwidth up to 300Mbps (Downstream 150Mbps, Upstream 150Mbps).

The units are compatible with most 1000BASE-FX SFP ports on Ethernet switches and media converters\* and feature a high speed VDSL2 port with an RJ45 connector (coax and screw terminal adapters are also included in the package).

The SFP modules are a perfect solution for extending the capability of SFP enabled Ethernet devices to support links from remote locations which are beyond the normal 100m (328ft) distance limit of Ethernet standards.

The SFP modules by default will link using a unique pairing method which ensures the optimum speed settings are selected to provide maximum link throughput over the connected cable type and distance. If using the remote (-R) model with the compatible AMG172 VDSL2 Extender the SFP will take its settings from the AMG172 unit set to Central (Master) mode.

\*Please check with the AMG Technical Team before ordering to ensure compatibility with your chosen SFP capable switch or media converter. Check the AMG website for a full list of compatible AMG switches and media converter models.

### / FEATURES

- Compatible with most 1000BASE-FX SFP Ports\*
- Supports speeds of up to 100Mbps over 400M of standard CAT 5e cable
- High speed Ethernet extension over UTP, Coax, CAT 5e/6/7, Alarm or Telephone cables (1 Pair)
- Compatible with AMG and 3rd party VDSL2 DSLAM units when selecting the Remote (-R) model
- Distances up to 2000m (6560ft) over coax cable or up to 3000m (9842ft) over CAT5e/6 UTP cable
- IEEE 802.1Q VLAN tag transparent
- Automatic selection of the optimum speed for the connected cable type and distance
- Compatible with J-Y(ST)Y 4x2x0.8 or J-Y(ST)Y 6x2x0.6 etc twisted pair cable
- Industry standard Small Form-Factor Pluggable (MSA compliant)
- AMG Lifetime Support Warranty

# Specifications.

## Standards.

IEEE802.3z	1000Base-X
ITU-T G993.1, G993.2, G993.5, G997.1, G998, G.INP	VDSL DMT Encoding

## Interface.

LED Indicators	Remote (RT) VDSL2 Link/Activity
Ethernet Ports	1x 1000Base-FX SERDES
VDSL2 Ports	1x RJ45 (2 pins used - 4 & 5)

## Power.

Power Inputs	From SFP Port
Operating Voltage	3.3V <sub>DC</sub>
Power Consumption	2.5W Max

## Packaging.

Shipping Weight	0.2kg / 0.44lb
Dimensions	(W x D x H) 158 × 66 × 20 mm 6.22 × 2.6 × 0.79 in

## Mechanical.

Housing	Aluminium
Dimensions:	(W x D x H) 79 × 14 × 17 mm 3.11 × 0.55 × 0.67 in
IP Rating	IP40
Installation	SFP Slot
Weight	0.1kg / 0.22lb

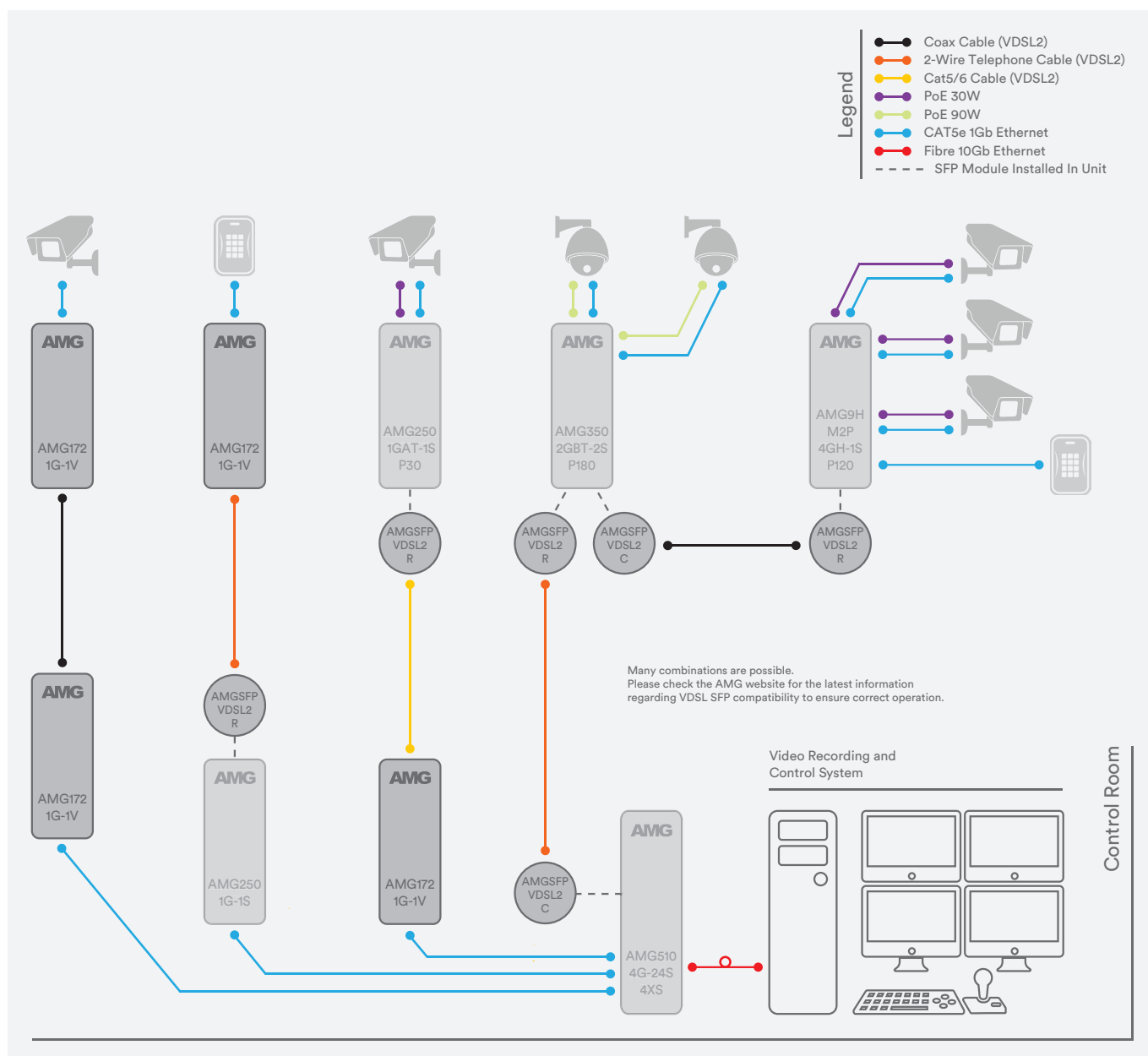
## Environmental.

Operating Temp.	-20°C to +75°C (SFP Cage)
Storage Temp.	-40°C to +85°C
Humidity	5% to 90% (non-condensing)
MTBF	1,466,521 hours
MTBF Standard	MIL-HDBK-217F GB 25°C
Heat Dissipation	8.5 BTU/h
Cooling	Passive Cooling
Noise Level	0 dBA

## Regulatory.

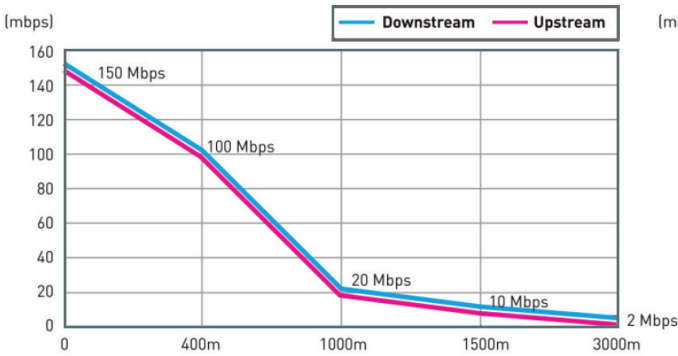
EMI	EN 55032 Class B CISPR 32
EMS	FCC Part 15B Class A EN 55024 CISPR 24 EN 61000-4-2 (ESD) EN 61000-4-3 (RS) EN 61000-4-4 (EFT) EN 61000-4-6 (CS) EN 61000-4-8 (PFMF)
Environmental	Reach RoHS WEEE

# Application Diagram.

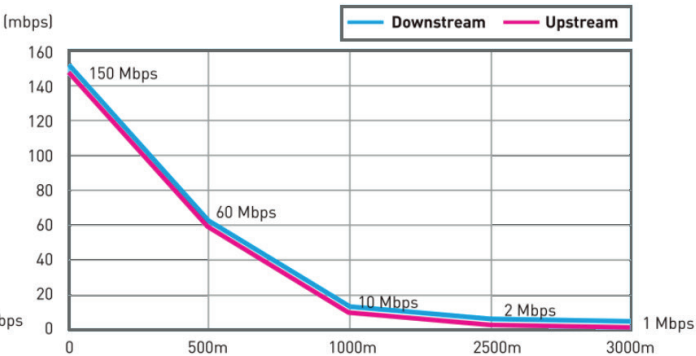


# Data Rate Performance.

Symmetric Profile Data Rate (using CAT 5e)



Symmetric Profile Data Rate (using 26AWG 0.45mm)



The performance data shown in these graphs is for reference only, the actual data rate may vary depending on the quality of the copper cable as well as environmental factors.

## Part Numbers.

### Industrial Gigabit Ethernet VDSL2 SFP Extenders

AMGSFP-VDSL2-C

1 x 1000BaseFX SFP, 1 x VDSL2 RJ45 For UTP, Coax or Telephone Cable, Central Type

AMGSFP-VDSL2-R

1 x 1000BaseFX SFP, 1 x VDSL2 RJ45 For UTP, Coax or Telephone Cable, Remote Type

\*Fully compatible with the AMG172 series stand-alone Industrial VDSL2 Ethernet Extenders. Contact your local AMG team for more information.

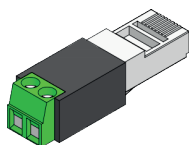
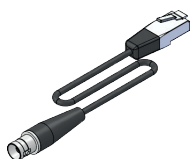
## Included Accessories.

RJ45 to Coax Cable

RJ45 to Coax Adapter Cable For Use With VDSL2 Port & Coaxial Cable

RJ45 to 2-Wire Adapter

RJ45 to 2-Pin Screw Terminal Adapter For Use With VDSL2 Port & 2-Wire Cable (Telephone, Bell, J-Y(ST)Y etc.)



In a continuing effort to improve and advance technology, product specifications are subject to change without notice. Please visit [www.amgsystems.com](http://www.amgsystems.com) for the latest product specifications.