# SFP-DAC-10G SERIES INDUSTRIAL 1/10GB ETHERNET DAC SFP+ MODULES



## Industrial Ethernet Solutions

AMG's industrial 10Gb DAC SFP's provide transmission of 1Gb or 10Gb Ethernet data over Direct Attach Cable (DAC) using passive Twinax cable technology.













[SFP-DAC-10G-3]

#### / OVERVIEW

The AMG SFP-DAC-10G series are industrial high speed Direct Attach Cables (DAC) offering transmission of 1Gb or 10Gb Ethernet data using passive Twinax cable technology over distances from 0.5m (1.6ft) to 5m (16.4ft).

The modules are compatible with most 1000BASE-X SFP ports and 10GBASE-R SFP+ ports on Ethernet switches and media converters<sup>1</sup> and use directly attached copper cable to provide the signal transmission which offers increased reliability and simplifies installation.

The SFP+ DAC modules are a perfect solution for providing connections between devices installed within the same rack or cabinet and offer a low cost alternative to the traditional optical SFP+ modules with associated optical patch cable.

#### / FEATURES

- Compatible with most 1000BASE-X SFP Ports and 10GBASE-R SFP+ Ports <sup>1</sup>
- Supports Ethernet speeds of up to 10Gbps
- Hot pluggable design allows for easy field replacement or upgrades
- Built-in EEPROM function
- Distances of 0.5m (1.6ft) to 5m (16.4ft) are available
- SFF-8431, SFF-8432 and INF-8074 compliant
- Low EMI metal housing with excellent ESD protection
- Programmed and tested in the UK
- Industry standard Small Form-Factor Pluggable (MSA compliant)
- AMG Lifetime Support Warranty



<sup>&</sup>lt;sup>1</sup> Check the AMG website for a full list of compatible AMG switches and media converter models. If you are unsure please check with the AMG Technical Services team before ordering to ensure compatibility with your chosen SFP+ capable switch or media converter.

## Specifications.

### Standards.

INF-8074 **SFP Transceiver** SFF-8431 SFP+ Transceiver

SFF-8432 Improved Pluggable Form-Factor

Multi-Source Agreement MSA

Interface.

SFP Slot 1000BASE-X SFP SFP+ Slot 10GBASE-R SFP+

Cable 30AWG Twinax (0.5m - 3m Models)

26AWG Twinax (5m Model)

Power.

**Power Inputs** From SFP+ Port

 $3.3V_{DC}$ Operating Voltage

Power Consumption 0.15W Max (For Each DAC Module)

Packaging.

Shipping Weight 0.16kg / 0.35lb (0.5m / 1.6ft Cable)

> 0.17kg / 0.37lb (1m / 3.3ft Cable)0.18kg / 0.40lb (1.5m / 4.9ft Cable) 0.19kg / 0.42lb (2m / 6.6ft Cable) 0.22kg / 0.49lb (3m / 9.8ft Cable) 0.44kg / 0.97lb (5m / 16.4ft Cable)

Dimensions:  $(W \times D \times H)$ 

0.5m to 3m Models  $220 \times 172 \times 40 \text{ mm}$ 

> $8.66 \times 6.77 \times 1.57$  in 260 × 200 × 60 mm

5m Model

 $10.24 \times 7.87 \times 2.36$  in

Mechanical.

Aluminium Housing Cable Black PVC Dimensions:  $(W \times D \times H)$ DAC Module  $58 \times 14 \times 13 \text{ mm}$ 

 $2.28 \times 0.55 \times 0.51$  in 102 × 14 × 13 mm DAC Module With Handle

 $4.02 \times 0.55 \times 0.51$  in

IP Rating IP40 Installation SFP+ Slot

Weight 0.07kg / 0.15lb (0.5m / 1.6ft Cable)

> 0.08kg / 0.18lb (1m / 3.3ft Cable) 0.09kg / 0.20lb (1.5m / 4.9ft Cable) 0.10kg / 0.22lb (2m / 6.6ft Cable) 0.13kg / 0.27lb (3m / 9.8ft Cable) 0.24kg / 0.53lb (5m / 16.4ft Cable)

Environmental.

Operating Temp: (Celsius / Fahrenheit)

-40 to +85°C / -40 to +185°F SFP Case Storage Temp. -40 to +85°C / -40 to +185°F

Humidity 5% to 90% (non-condensing) **MTBF** >250,000 hours

MTBF Standard Telcordia SR-332 GF 30°C **Heat Dissipation** 0.5 BTU/h (For Each DAC Module)

Cooling Passive Cooling

Noise Level 0 dBA

Regulatory.

**EMI** EN 55022 Class B

> CISPR 22 VCCI Class B

FCC Part 15B Class B

**EMS** MIL-STD-883 (Method 3015)

EN 61000-4-2 (ESD) EN 61000-4-3 (RS)

Environmental Reach

RoHS **WEEE** 

Supply Chain NDAA & TAA Compliant

Designed to meet NEMA TS2



## Part Numbers.

## **DAC Cables**

Part Number	Description	Length	Cable Gauge	Min Bend Radius*
SFP-DAC-10G-0.5	SFP+ DAC Cable, 1/10Gb, Passive, 0.5m	0.5m	30AWG	23mm
SFP-DAC-10G-1	SFP+ DAC Cable, 1/10Gb, Passive, 1m	1m	30AWG	23mm
SFP-DAC-10G-1.5	SFP+ DAC Cable, 1/10Gb, Passive, 1.5m	1.5m	30AWG	23mm
SFP-DAC-10G-2	SFP+ DAC Cable, 1/10Gb, Passive, 2m	2m	30AWG	23mm
SFP-DAC-10G-3	SFP+ DAC Cable, 1/10Gb, Passive, 3m	3m	30AWG	23mm
SFP-DAC-10G-5	SFP+ DAC Cable, 1/10Gb, Passive, 5m	5m	26AWG	33mm

<sup>\*</sup> Note - It is important to maintain the correct cable bend radius for each cable as detailed in the above table and secure strain relief for the cable.

