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.

Copper DAC	**1000 FX** Compliant	**10G R** Compliant	**Temp** -40~+85ºC	**NDAA/TAA** Compliant

[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[1] 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 [1]

— 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

[1] 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.

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Specifications.

Standards.

INF-8074	SFP Transceiver
SFF-8431	SFP+ Transceiver
SFF-8432	Improved Pluggable Form-Factor
MSA	Multi-Source Agreement

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
Operating Voltage	$3.3V_{DC}$
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 x D x H)
0.5m to 3m Models	220 × 172 × 40 mm
	8.66 × 6.77 × 1.57 in
5m Model	260 × 200 × 60 mm
	10.24 × 7.87 × 2.36 in

Mechanical.

Housing	Aluminium
Cable	Black PVC
Dimensions:	(W x D x H)
DAC Module	58 × 14 × 13 mm
	2.28 × 0.55 × 0.51 in
DAC Module With Handle	102 × 14 × 13 mm
	4.02 × 0.55 × 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)
SFP Case	-40 to +85°C / -40 to +185°F
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

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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

* 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.

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