EDIMAX
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10GbE SFP+ DAC Direct Attach Cable

EA1-005D / EA1-020D

FEATURES

- High-speed data rates up to 10Gbps
- Compatible with SFP+ MSA (Multi-Source Agreement)
- Backward compatible to SFP (1Gbps)
- Easy plug-and-play with hot-pluggable SFP 20PIN footprint
- I/O connector designed for high speed differential signal applications
- Improved Pluggable Form-Factor (IPF) compliant for enhanced EMI/EMC performance
- Lower power consumption with 0.5W Max.
- Work with any devices equipped a SFP+/SFP port such as switch, storage, server, NIC (PCI-E adapter), date center, high-performance computing and etc.

OVERVIEW

EDIMAX EA1 Series SFP+ Direct Attached Cable (DAC) assembly with 2 SFP+ connectors at both ends offers high-performance, cost-effective solutions for 10G Ethernet and 10G Fiber channel applications to achieve high port density. It is suitable for very short distances to connect within racks and adjacent racks to fill the expanding need for cost effective interconnects.

Fully complies with MSA standards, the EA1 Series is backward compatible to SFP (1Gbps). It allows transmission at their maximum speed of up to 10Gbps and provides cost-effective, durable and flexible solution than a fiber cable. Furthermore, allowing shorter-distance, high-density connections made between networking equipments with SFP+ ports.

Cost Effective High-Bandwidth | 10GbE SFP+ Copper Connection

The EA1 series 10G SFP+ DAC is a copper cable designed with SFP+ connectors on both ends and is less expensive than a 10G optical transceiver that support connections of up to 10Gbps data transmission rate - much faster than SFP which only supports 2.5 Gbps, while having lower latency and power consumption. The 10G SFP+ DAC cabling saves on connected devices, eliminating the need for patch panels. Servers and network equipment can be directly connected to ToR (Top-of-Rack) switches, which also directly saves on costs.

High Performance and Reliability | Compatible with SFP+ MSA

The SFP+ 10G DAC cable is compliant with the current SFF-8431, SFF-8432 and SFP+ MSA (Multi-Source Agreement) specifications and is compatible with EDIMAX and other brand products with standard SFP+/SFP ports, offering you an array of options with top performance and reliability.

Wide Compatibility | Backward Compatible to SFP (1Gbps)

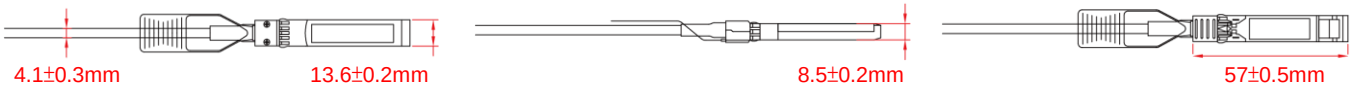
The EA1 Series is backward compatible with the SFP (1Gbps). It allows transmission at their maximum speed of 10Gbps and provides a more cost-effective, durable and flexible solution than a fiber cable. Offering shorter-distance, high-density connections between networking equipments such as network switch, server, Network Attached Storage (NAS), storage area network, NIC (PCI-E adapter), data center or high-performance computing.

Easy Plug-and-Play | Hot-Pluggable SFP+ Supported

Equipped with plug-and-play Hot-Pluggable or said Hot-Swappable SFP+ connectors on both ends. No configuration required, in addition, there is no need to shut down or put the data on hold when support inserting or pulling out the transceivers to avoid network down-time.

SPECIFICATIONS

HARDWARE	
Cable Type	Passive Copper Twinax Cable, Oxygen-Free Copper
Connector	SFP+ Connectors on Both Ends
Conductor Gauge	30AWG
Jacket	PVC
Dimensions	Connector: 13.6(W) x 57(D) x 8.5(H) mm Cable Length: • EA1-005D: 0.5 Meter/1.64 Feet • EA1-020D: 2 Meter/6.54 Feet
PERFORMANCE	
Data Transmission Rate	Up to 10Gbps
Bit Error Rate(BER)	> 10^{-12}
OTHERS	
Standard	SFP+ MSA (Multi-Source Agreement) SFF 8431, SFP+ High Speed Electrical Interface SFF-8472, Digital Diagnostic Monitoring Interface for Optical Transceivers
Temperature Range	Storage: -40~ 85 ˚C (-40~185°F) Operation: 0~ 70 ˚C (32~158°F)
Certification	CE, RoHS



PIN Assignment

PIN	Logic	Symbl	Description
1		VeeT	Transmitter Ground
2	LV-TTL-O	TX_Fault	N/A
3	LV-TTL- I	TX_DIS	Transmitter Disable
4	LV-TTL- I/O	SDA	2-Wire Serial Data
5	LV-TTL-I	SCL	2-Wire Serial Clock
6		MOD_DEF0	Module Present, Connect to VeeT
7	LV-TTL-I	RS0	N/A
8	LV-TTL-O	LOS	LOS of Signal
9	LV-TTL-I	RS1	N/A
10		VeeR	Receiver Ground
11		VeeR	Receiver Ground
12	CML-O	RD-	Receiver Data Inverted
13	CML-O	RD+	Receiver Data Non-Inverted
14		VeeR	Receiver Ground
15		VccR	Receiver Supply 3.3V
16		VccT	Receiver Supply 3.3V
17		VeeT	Transmitter Ground
18	CML-I	TD+	Transmitter Data Non-Inverted
19	CML-I	TD-	Transmitter Data Inverted
20		VeeT	Transmitter Ground

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