APTEK APDAC-10G

SFP+ Direct Attach Passive Copper Cable

The **APTEK APDAC-10G** DAC SFP+ cable assemblies are high-performance, cost-effective I/O solutions for 10Gb Ethernet and 10G Fibre Channel applications. SFP+ passive copper modules allow hardware manufacturers to achieve high port density, configurability, and utilization at a very low cost and to reduce power budget. The high-speed cable assemblies meet and exceed the performance and reliability requirements stipulated by Gigabit Ethernet and Fibre Channel industry standards.

Features:

- Support for multi-gigabit data rates up to 10.5Gbps
- Data rates backward compatible to 1Gbps
- 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
- Compatible to SFP+ MSA
- Temperature Range: 0~70 °C
- Comply with RoHS 2.0

Applications:

- High capacity I/O in Storage Area Networks, Network Attached Storage, and Storage Servers
- Switched fabric I/O such as ultra high bandwidth switches and routers
- Data center cabling infrastructure
- High density connections between networking equipment

Recommended Operating Conditions:

Parameter	Symbol	Min	Typical	Max	Unit
Storage Ambient Temperature		-40		+85	°C
Operating Case Temperature	Tc	-40		+85	°C

Systems

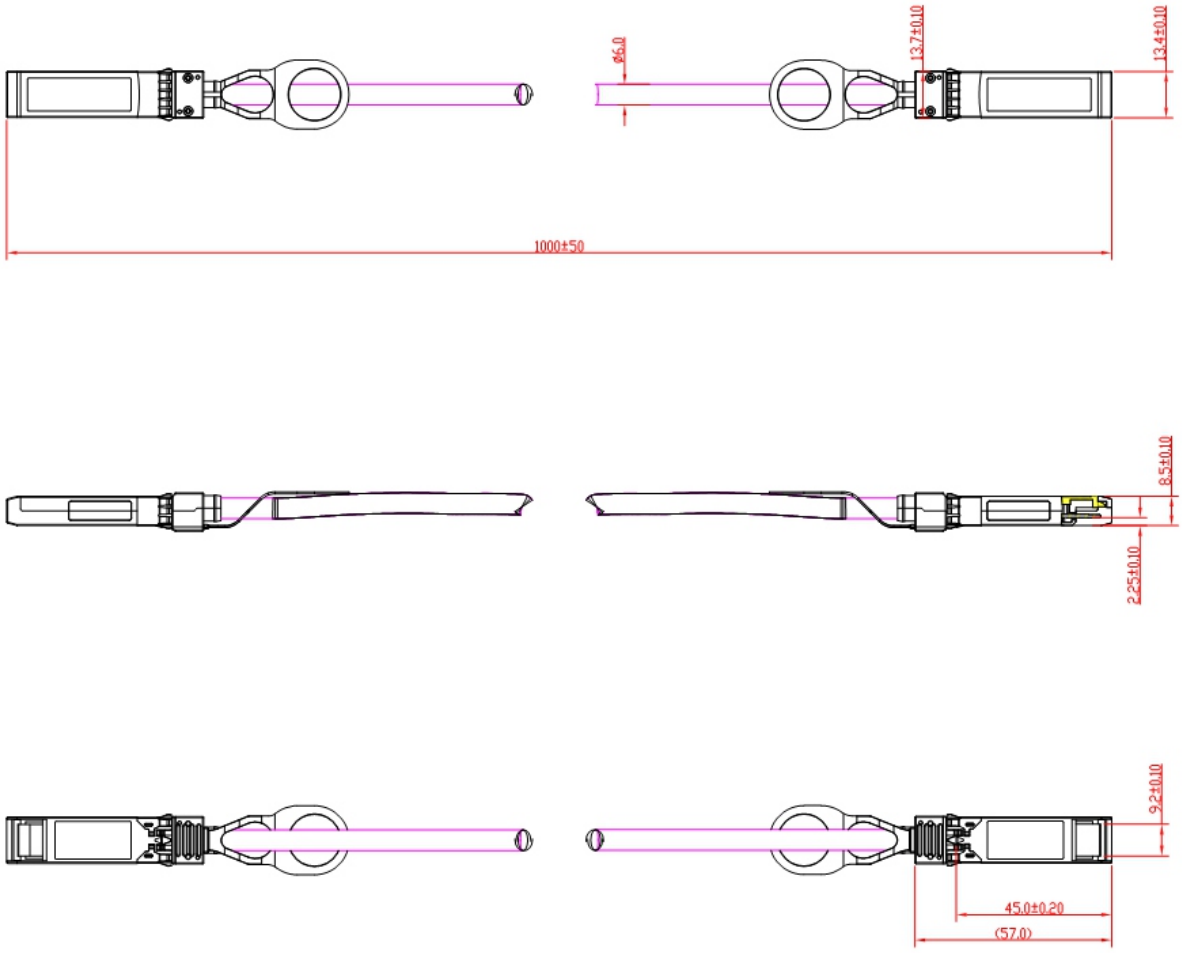
Performance	Media
10.5 Gbps line speed, full duplex Bit error rate: better than 10E-12	Hot-pluggable, industry-standard Small Form-Factor Pluggable(SFP+) copper cable, available as 1m,3m or 5m

Recommended Operating Conditions:

Pin	Logic	Symbol	Name/Description	Notes
1		VeeT	Transmitter Ground	
2	LV-TTL-O	TX_Fault	N/A	1
3	LV-TTL-I	TX_DIS	Transmitter Disable	2
4	LV-TTL-I/O	SDA	Tow Wire Serial Data	
5	LV-TTL-I	SCL	Tow Wire Serial Clock	
6		MOD_DEF0	Module present, connect to VeeT	
7	LV-TTL-I	RS0	N/A	1
8	LV-TTL-O	LOS	LOS of Signal	2
9	LV-TTL-I	RS1	N/A	1
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	Transmitter 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	

1. Signals not supported in SFP+ Copper pulled-downto VeeT with 30K ohms resistor
2. Passive cable assemblies do not support LOS and TX_DIS

Mechanical Dimensions:



Ordering Information:

Part Number	Cable Length
APTEK APDAC-10G-2M	2m
APTEK APDAC-10G-3M	3m
APTEK APDAC-10G-5M	5m