10GE-M-SFPP-SAC

The 10GE-M-SFPP-SAC Media Converter is a versatile solution catering to a broad range of high-speed environments. Designed for simplicity, it supports a single, cost-effective fiber link, accommodating any copper speed from 1Gbps to 10Gbps. The plug-and-play functionality ensures ease of use, with the UTP port automatically detecting cabling type, pin polarity, port speed, and mode without user intervention. The converter's fiber port, utilizing SFP or SFP+ modules, offers flexibility in network design and future upgrades. With a DIP switch for Bypass or Adaptive mode, it facilitates flexible conversion technology for 1Gbps to 10Gbps RJ-45 port to a pluggable 1G/10GBase-X fiber SFP/SFP+ port.

Features

- Provide one 10 Gigabit optical port and one 10 Gigabit adaptive electrical port.
- The copper port supports 1000Base-T, 2.5/5/10GBase-T auto-negotiation.
- IEEE802.3x flow control supports full duplex.
- Support half-duplex backpressure flow control.
- Working wavelengths are 850nm, 1310nm, and 1550nm (optional).
- Provide multiple fiber transmission modes such as dual-fiber multimode, dual-fiber single mode, and single-fiber single mode.
- Adaptive mode with one-click code dialing LFP link detection function.
- Adaptive mode and straight-through mode are controlled by the Dip switch.

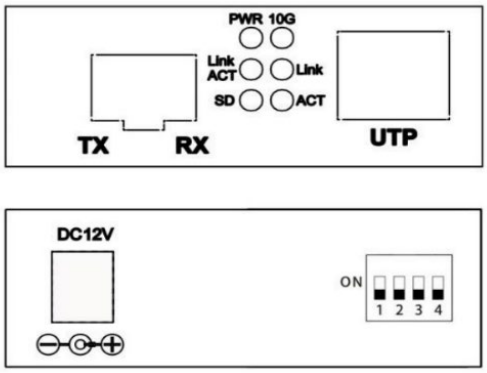
Technical Parameters

Item	Description
Standard	1000Base-T, 2.5GBase-T, 5Gbase-T, 10Gbase-T, 10GBase-R
Support	1000Base-T: Cat5 UTP/STP. MAX 100m; 2.5GBase-T: Cat5e UTP/STP. MAX 50m; 5GBase-T: Cat5e UTP/STP. MAX 50m; 10G Base-T: Cat6a UTP/STP. MAX 50m;
Electrical interface	Interface type: RJ45 Transmission rate: 100/1000Base-T, 2.5/5/10GBase-T auto-negotiation Cable type: UTP-6 or higher; Transmission distance: 100m
Optical port	Interface type: SFP+ Transmission rate: 10Gbps Fiber type: Multimode: 50/125um; Single mode: 9/125um Transmission distance: 300m~80Km
Operation wavelengths	850nm, 1310nm, 1550nm optional
Dimensions	94mm x 70mm x 26mm (L x W x H)
Weight	0.18kg
Standalone Power Supply Adapter	External AC/DC power supply, Universal AC input Output Voltage: 12V DC @ 1A Power Consumption: 5 Watts maximum
Operating Temperature	0 to 60°C
Operating Humidity	10% to 95% (non-condensing)
Storage Temperature	-15 to 65°C

Optical Specifications

10GBaseFX		
	Multimode	Single mode
wavelength	850 nm 50/125um, 800 MHz*km	1310nm 9/125 um
Maximum transmit	1 dBm	0 dBm
Minimum transmit	-6 dBm	-6 dBm
Receiving sensitivity	-12 dBm	-13 dBm
Link budget	6 dBm	7 dBm
Typical distance	300m	10 km
Saturation	-3 dBm	-3 dBm

Front and Back Panel



LED Status

LED	Status	Status	Description
PWR	Power	ON	Power is turned ON
		OFF	Power is turned OFF
Link/ACT (FX)	Fiber Port Link/ Active	ON	Fiber Port is Linked
		OFF	Fiber Port is not Linked
		Blink	Fiber Port is active
SD	Fiber Signal	ON	Fiber Signal is detected
		OFF	Fiber Singal is not detected
10G	UTP Speed	ON	2.5Gbps to 10Gbps
		OFF	10/100/1000Mbps
Link	UTP Link	ON	UTP is Linked
		OFF	UTP is not Linked
ACT	UTP Active	Blink	UTP is active

DIP Switch Settings

DIP Switch No	Switch Status	Description
Both 1 and 3	OFF (or in Down position)	Adaptive mode. LFP Function is disabled. SFP slot **MUST** be installed with a 10G SFP+. See Note 1.
	ON (or in UP position)	Bypass mode. LFP Function is disabled. See Note 2.
Either 1 or 3	ON (or in UP position)	LFP Function is enabled. SFP slot **MUST** be installed with a 10G SFP+. See Note 3.
2 and 4	Not in use	Not applicable.

Note 1. When both DIP switches 1 and 3 are set to OFF, the UTP port will be in Adaptive mode. The SFP+ slot **MUST** be installed with only 10G SFP+ module, and the UTP port will support various speed including 1G/ 2.5G/ 5G / 10Gbps.

Note 2. When both DIP switches 1 and 3 are set to ON, the converter will operate in Bypass mode. The SFP+ slot can be installed with any optical module including 1G/ 2.5G/ 5G / 10Gbps speed, and the UTP port will adjust to the same fiber speed respectively.

Note 3: The SFP+ slot **MUST** be installed with only 10G SFP+ module. When the LFP (Link Fault Propagation) is enabled, the media converter will pass the linkdown status from its outage interface to the other working interface by stopping its laser/electrical signal transmission. The absence of this signal to the adjacent device will immediately trigger the linkdown alarm to the network administrator. As such, the LFP feature offers an efficient solution to monitor the network, which can minimize the downtime caused by the link outage.