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![SAN TELEQUIP logo — Connecting. Converting. Leading!]

Industrial PoE Media Converter, SC12FPIA, 10/100Base-TX with POE to 100Base-FX

Overview

The SC12FPIA 100P series is Industrial PoE Media Converter. It is the ideal solution for powering remote devices such as IP phones, video cameras, wireless access points, etc. In addition to transmitting data, the twisted-pair injects power down the cable, allowing a remote Power over Ethernet Device to operate without the need of any additional power source. SC12FPIA Power over Ethernet Powered Device is IEEE 802. 3af/at complaint.

The SC12FPIA series is designed to extend the distance of a network by converting Fast Ethernet data from twisted pair cable to 100FX multi-mode or single-mode fiber-optic cable and operating distance from 2km to120km depending on dif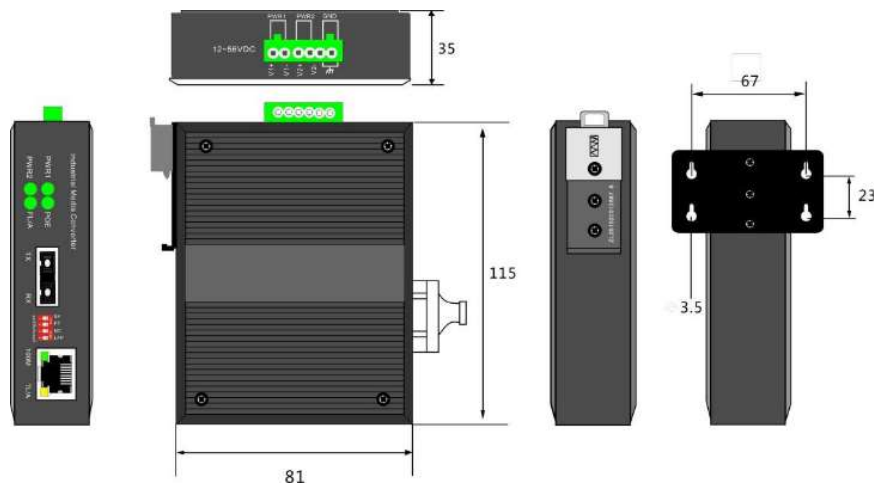ferent model. It can be installed on DIN-rail or wall-mount, allowing users to deploy any mix of network conversions required
TheSC12FPIA 100P series converters are fully compatible with long packets, enabling them to be used in modern networks.

Features

- UTP with PoE to fiber media converter
- IEEE 802. 3af/at complaint
- RJ45 support auto MDI/MDI-X function Auto-negotiation speed, half/full-duplex
- Store-and-forward & Cut-through (optional)
- Built-in LFP (Link-fault-pass-through)
- Jumbo frame:9k bytes
- Support PD Signature Sensing. After PSE and PD signature sensing, then POE function start to work

- Support wide operating temperature (-40 to +85ºC)
- Wide-range redundant power design (12 to 56VDC) **48V DC for PoE Applications**
- Reverse polarity protection for Power Input
- Overload current resettable fuse present
- Provide EFT protection for Power line
- Support Ethernet ESD protection
- IP-40 Ingress protection
- DIN-Rail and Wall-Mounted Installation

Physical

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Application

Technical Specifications

Standards	IEEE802.3 10BaseT, IEEE802.3u 100BaseT(X)
	IEEE802.3x Flow control
	IEEE 802.3af/at POE
Processing Type	Store and Forward
Back Plane	0.4 Gbps
PoE Compliance Type	Mode A, End Span type Pin Out details : 1, 2, 3, 6 Data + Power Pin 1 : RX+, DC+, Pin 2 : RX-, DC+ Pin 3 : TX+, DC-, Pin 6 : TX-, DC-
Performance	
MAC Address Size	2Kbit
Packet Buffer Size:	1Mbit
Time Delay	<10us
Frame	9k bytes
Data Rate	10/100M
Copper Port	
Connector	RJ45
Distance	100m
Data Rate	155M
Fiber Port	
Connector	SC as default, FC/ST Optional
Distance	MMF=2km, SMF=20/40/80/100/120km
DIP switch	1 ON + 2 ON = Modified Cut-through Mode
	1 ON + 2 OFF = Converter Mode
	1 OFF + 2 ON = Cut-through
	1 OFF + 2 OFF= Store and forward mode
	4 ON = LFP Enable,
	4 Off = LFP Disable
	PWR1:ON = Power Connected
	PW R2:ON = Power Connected
LED indicators	FL/A: ON = Fiber Connected, Active = Data Transmitting
	TL/A: ON = Copper Connected, Active = Data Transmitting
	100M: ON = 100M Data Rate Transmitting
	POE: ON = Power Working, Off = No Power

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Power	Input Voltage : 12 to 56V DC Redundant power input. **48V DC for PoE Applications**
	Power Consumption : ≤5W
	PoE Budget : 15.4W (PoE), 30W (PoE+)
	Protection : Overload Current, Reverse Polarity
	Connector : Terminal Block
Environment	Operating Temperature :-40˚C to +85˚C
	Storage Temperature :-40˚C to +95˚C
	Relative Humidity : 5-95% (no condensation)
Physical Characteristics	
Housing	Aluminium Alloy
Ingress Protection	IP40
Installation	DIN-rail mounting, wall mounting (with optional kit)
Dimension	115 (H) *81 (D) *35 (W) mm
Weight	300 gm (device)

Standards and Certifications tested for

EMC	CE
EMI	**FCC Part15 CLASS A**
	IEC 61000-4-2 Level 4 (8K/15K)
	IEC 61000-4-3 Level 3 (10V/m)
EMS	IEC 61000-4-4 Level 3 (1V/2V)
	IEC 61000-4-5 Level 3 (4KV/2KV)
	IEC 61000-4-6 Level 3 (10V/m)
	IEC 61000-4-8 Level 4 (30A/m)
Shock	IEC 60068-2-27
Free fall	IEC 60068-2-32 0.5m
Vibration	IEC 60068-2-6
Railway Traffic	EN50121-4

Ordering Code	**: SC12FPIA M/S000 SC**
SC12FPIA	: Base code, Industrial Grade PoE-af/at Media Converter
M/S	: Multimode / Singlemode
000	: Distance in Km for Singlemode. 020 is default
SC	: SC Connector as default

NOTE :
48V,Power supply has to be provided by user or to be ordered separately.