Industrial PoE Media Converter

ELECTRA-POE-IMC-2PORTS

Compact Industrial Gigabit PoE Media Converter

Temperature hardened and increased surge protection

Overview

ELECTRA-POE-IMC-2PORTS series media converters transparently connect 2GbE speed fiber optic segments to 2x 10/100/1000Base-T twisted pair cables, while supporting 30W PoE output. The converters are also featured with extra-long UTP transmission up to 250 meters with PoE, allowing connecting cameras in much longer distance. They allow Ethernet data transmission of up to 10K bytes Jumbo Frame thus offer suitable solution for VLAN trunks, Q-in-Q, MPLS connections or other applications where jumbo frame support is required. This series converters support both multimode and single mode fixed fiber ports as well as flexible SFP-based port for various types of transceivers.

It is a small sized equipment with fan-less design and low power consumption for efficient and hassle-free operation. It complies with the listed Ethernet standards, has built-in lightning protection and anti-static protection and features a wide-range operating temperature from -40°C to +75°C.

Key features

- 2x10/100/1000Base-T RJ-45 interfaces with auto MDI/MDI-X function, 2x 100/1000ase-X SFP slot fiber interface
- IEEE802.3af/802.3at PoE+ standard compliant
- Support Link Fault Pass function and 250m ultra-long copper cable transmission
- Supports auto-negotiation and 100Mbps half/full duplex and 1Gbps full duplex mode
- IP40 protection level, fan-less design, plug and play installation
- PoE Watchdog function, which can restart the equipment automatically when it is frozen
- Redundant power inputs in range of DC44-57V, with polarity reverse protection
- 4KV surge protection; ESD: 8KV/contact, 15KV/air protection

Specifications

Interface Specifications	Fiber port	2 x 100/1000Base-X SFP (without SFP)
	Copper port	2 x 10/100/1000Base-T PoE+ (RJ45)
Power Specifications	Input voltage	44-57VDC, redundant power inputs
	Input current	1.5A max
	Power consumption	≤ 2.5W (without PoE) ≤ 60W (PoE power budget)
	Power interface	4-pin Terminal Block Polarity reverse protection Over-voltage protection
LED Indicators	1 – PWR (Green)	Power on indicator
	2 – PoE (Red)	Off (PoE output power < 50% rated) Blinking (50% < PoE output power < 90%) On (PoE output power > 90% rated)
	3 – RJ45 (Green/Yellow)	Green off (port link down) / blinking (data transmitting) / on (power link up) Yellow off (no PoE) / on (PoE in use)
	4 – Fiber (Green)	off (port link down) / blinking (data transmitting) / on (power link up)
DIP Switch	Dip switch definition	1. Port isolation 2. Fiber port 100/1000M selection 3. 250m long-distance mode 4. PoE watchdog
Specifications	Switching capacity	Gbps
	Packet forwarding rate	8.92Mpps
	MAC address table	8K
	VLAN	4K
	Buffer	1M
	Forwarding delay	< 5us
	Jumbo frame	10K bytes
	Auto MDI/MDIX	Support
	Watchdog	Support
Standards	IEEE 802.3	10BASE-T
	IEEE 802.3u	100BASE-TX
	IEEE 802.3ab	1000BASE-T
	IEEE 802.3x	Full-duplex flow control
	IEEE 802.3az	Energy Efficient Ethernet
	IEEE 802.3af	Power over Ethernet
	IEEE 802.3at	Power over Ethernet plus PSE
Environment	Operating temperature	-40°C ~ +75°C
	Storage temperature	-40°C ~ +85°C
	Relative humidity	5% ~ 95% (non-condensing)
	Thermal design	Fan-less
	MTBF	100,000 hours
	Protection level	IP40
Standards compliance	Surge protection of Power	IEC 61000-4-5 Level 3 (4kV/2kV) (8/20us)

	Surge protection of Ethernet port	IEC 61000-4-5 Level 3 (4kV/2kV) (10/700us)
	DIP	IEC 61000-4-11 Level 3 (10V)
	ESD	IEC 61000-4-2 Level 4 (8K/15K)
	Shock resistance	IEC 60068-2-27
	Free fall	IEC 60068-2-32
	Vibration	IEC 60068-2-6
	Certifications	CE, FCC, CCC & RoHS
Physical parameters	Dimensions	30x85x85 mm
	Weight	Net weight 0.21KG
	Installation Method	DIN-rail mounted

Ordering information

Model	Description
ELECTRA-POE-IMC-2PORTS	Unmanaged Industrial PoE Media Converter, DIN-rail, 2x10/100/1000Base-T RJ45 PoE+ port + 2x100/1000Base-X SFP (optional SC/ST/FC) fiber port, IP40 protection level, -40 ~ +75°C operating temperature