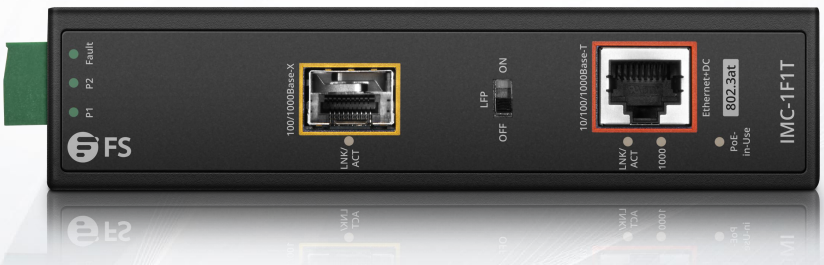
Industrial PoE+ Ethernet Media Converter Datasheet

Industrial Network Power Sourcing Solution.



Overview

The Industrial Gigabit PoE+ Ethernet Media Converter delivers up to 30 watts of power output and its 100/1000Base-X fiber optic uplink port provides long distance, high speed and stable data transmission to PDs. The converter supports 12~48V DC power input or 24V AC power input for power redundancy and operational flexibility.

Being able to operate under the temperature ranging from -40 to 75℃ and with an IP30 rugged case, the Industrial Gigabit PoE+ Ethernet Media Converter can be placed in almost any difficult environment.

Benefits

- Compliant with IEEE802.3af/at PoE+ standard
- Provides up to 30 watts of PoE output power
- Supports auto-negotiation and 10/100Mbps half/full duplex and 1000Mbps full duplex mode on RJ45 port
- Remote power feeding up to 100m
- Provides DIP switch for LFP function setting
- IEEE 802.3x Flow Control
- Store and Forward mechanism

Key Features

Fiber-optic Link Capability Extends the Range of Network Deployment

The maximum distance between the PoE PSE and PD is 100 meters. To extend the network device deployment range, the Industrial Gigabit PoE+ Ethernet Media Converter is integrated with Fiber interface. It is used to convert 10/100/1000Base-T signal to 100/1000Base-X that allows two different segments to connect easily, efficiently and inexpensively. It provides different diverse fiber connecting types to meet different network applications. With the long fiber distance support, it still sustains the transmission performance as high as 1000Mbps. It works in the high performance Store and Forward mechanism, and can prevent packet loss with IEEE 802.3x flow control (full-duplex) and the Link Fault Pass Through Function with the DIP switch design.

Link Fault Pass Through Function

The Industrial Gigabit PoE+ Ethernet Media Converter provides DIP switch to disable or enable the Link Fault Pass Through Function. When the DIP switch is ON, the Link Fault Pass Through Function is enabled. Then if the TP line or fiber line of the device which connected to the converter loses the link, the converter's fiber will disconnect the link of transmission. It can immediately alarm the administrators over the issue from the link media and provide an efficient solution to monitor the network power usage.

Flexible and User-friendly Power Sourcing Solution

To facilitate the 802.3at power PoE+ usage with the commonly-used 12~48V DC power input or 24V AC power input for transportation and industrial-level applications, the Industrial Gigabit PoE+ Ethernet Media Converter adopts the 12~48V DC to 52V power boost technology to solve power source issue but does not require special power supplies. Its wide-ranging voltages design is suitable for worldwide operability with high availability applications requiring dual or backup power inputs.

With data and Power over Ethernet from one unit, the Industrial Gigabit PoE+ Ethernet Media Converter can reduce cable deployment and eliminate the need for dedicated electrical outlets on the wall, ceiling or any unreachable place. The converter provides the easiest way to power network equipment such as PTZ (Pan, Tilt & Zoom) IP cameras, speed dome IP cameras, color touch-screen VoIP telephones, multi-channel IEEE 802.11a/b/g/n/ac wireless LAN access points and other network devices that need a higher power to function normally. For instance, users can flexibly install security IP camera, wireless access point and other IEEE 802.3at/IEEE 802.3af compliant network equipment in the public areas such as stations, freeways, airports and campuses for surveillance and wireless roaming needs.

Environmentally Hardened Design for Industrial PoE Networks

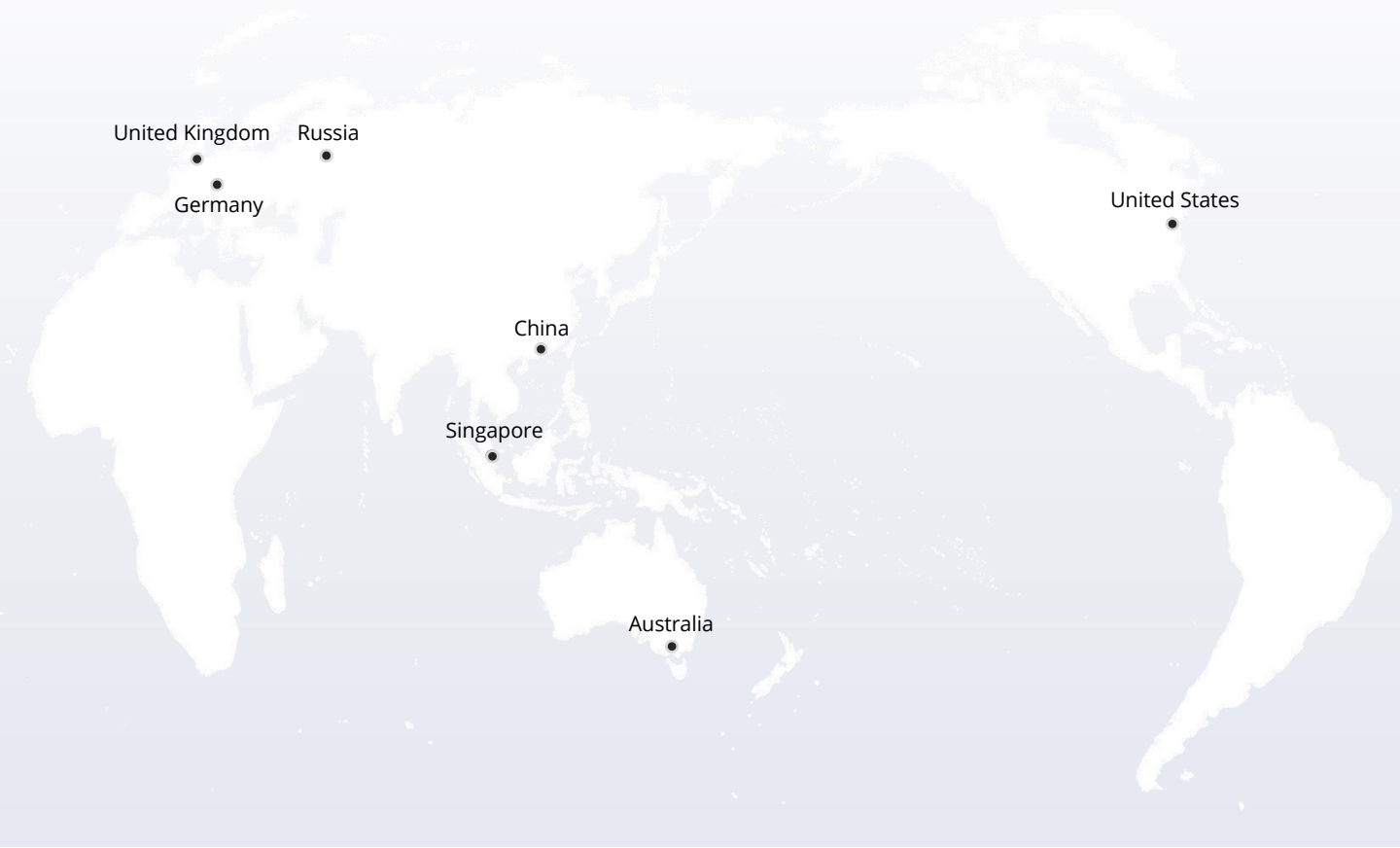
The Industrial Gigabit PoE+ Ethernet Media Converter is specifically designed with durable components and strong housing case to operate reliably in electrically harsh and climatically demanding environments like plant floors or curbside traffic control cabinets. The converter is packaged in a compact, IP30 rugged case that allows either DIN-rail or wall mounting to have the efficient use of cabinet space. With IP30 rugged case protection and PoE design, the Industrial Gigabit PoE+ Ethernet Media Converter is ideal for service providers, campuses and public areas to deploy PoE wireless access points, IP cameras or IP phones in any places easily and efficiently with cost-effectiveness. It can also operate in a wide temperature range of -40 to 75 ℃, so it can be placed in almost any location.

Specification

	IMC-1F1T
Copper Interface	1x 10/100/1000Base-T RJ45
Fiber Optic Interface	1x 100/1000Base-X SFP
PoE Standard	Compliant with IEEE802.3af/at
Input Voltage	12~48V DC, 3A max. 24V AC, 1.5A max, 50~60Hz
Output Voltage	52V DC
Power Consumption	12V DC: 4.7W/16BTU, 48V DC: 4.8W/16BTU (without PoE) 12V DC: 30W/112BTU, 48V DC: 31W/105BTU (with PoE)
Power Pin Assignment	End-Span, 1/2 (+), 3/6 (-)
PoE Power Budget	30W
Switch Architecture	Store and Forward
Flow Control	Back pressure for half duplex mode IEEE 802.3x pause frame for full duplex mode
Jumbo Frame	9K
ESD Protection	6KV DC
Cable	Twisted-pair: Cat 5/5e/6 Ethernet cable Fiber Optic: MM: 50/125 μm or 62.5/125 μm fiber optic cable SM: 9/125 μm fiber optic cable
Speed	Twisted-pair: 10/100Mbps for half/full duplex 1000Mbps for full duplex Fiber Optic: 100/1000Mbps for full duplex
Standards and Protocols	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3z Gigabit Ethernet over Fiber Optic IEEE 802.3x Flow Control IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus

Specification

	IMC-1F1T
Quality Certification	FCC, CE, RoHS, REACH, RCM, EAC, WEEE
Operating Temperature	-40 to 75℃
Storage Temperature	-40 to 85℃
Operating Humidity	5 to 95%, non-condensing
Storage Humidity	5 to 95%, non-condensing
MTBF	＞100,000 Hours @ 25 ℃
Dimensions (Hx Wx D)	1.26"x 3.43"x 5.31" (32x87x135mm)



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