

IGUP-805AT

Industrial 1-Port 100/1000X SFP to 1-Port 10/100/1000T 802.3bt PoE++ Media Converter



PLANET IGUP-805AT Industrial Gigabit Media Converter combines Ethernet media conversion (from 1000BASE-X to 10/100/1000BASE-T) with **802.3bt Power over Ethernet Plus Plus (PoE++)** injector function to deliver up to **95 watts** of power output and high data transmission speed to PDs (powered devices) installed in a remote area where sufficient and reliable power input is required. Its 1000BASE-X fiber optic uplink port provides long distance, high speed and stable data transmission to a remote core network. The special and convenient power system of the IGUP-805AT supports dual **12~54V DC** power inputs for power redundancy and operational flexibility.

Being able to operate under the temperature ranging from **-40 to 75 degrees C** and with an IP30 rugged case, the IGUP-805AT can be placed in almost any difficult environment.



Fiber-optic Link Capability Extends the Range of Network Deployment

The maximum distance between a PoE PSE (power sourcing equipment) and PD via Ethernet cable is 100 meters. To extend the PoE deployment range, the IGUP-805AT is integrated with fiber interface for farther distance applications. The IGUP-805AT's fiber connector type is as follows:

 One SFP interface supporting 100BASE-FX/1000BASE-X multi/single mode SFP module and transmission distance up to 120km (depending on SFP module)

Physical Port

- One 10/100/1000BASE-T with IEEE 802.3bt++ Gigabit RJ45
 port
- 1 SFP port, supporting 100/100BASE-X transceiver dual mode

Power over Ethernet

- Complies with IEEE 802.3bt PoE++ Type-4 PSE
- Compatible with IEEE 802.3at/af PoE+ standard
- 1 IEEE 802.3 bt/at/af device powered
- Supports PoE Power up to 95 watts for PoE port
- Provides DC 54V power over RJ45 Ethernet cable to PD with Ethernet port
- Auto detects IEEE 802.3bt/at/af equipment and protects devices from being damaged by incorrect installation
- Remote power feeding up to 100m
- Auto detects powered device (PD)

Layer 2 Features

- Supports auto-negotiation and 10/100Mbps half / full duplex and 1000Mbps full duplex mode on RJ45 port
- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause frame flow control (full-duplex)

Hardware

- · LED Indicators
 - System: Power 1, Power 2, Alarm and PoE usage
 - Fiber port: LNK/ACT
 - 10/100/1000BASE-T port: LNK/ACT, PoE-in-use
- DIP switch 1: LFPP (Link Fault Passthrough PoE Control) On/Off
- DIP switch 2: PoE (Legacy / BT) mode selection

Industrial Case and Installation

- IP30 metal case
- DIN-rail, wall-mount or side wall-mount design for redundant power design
- 12 ~ 54V DC redundant power with reverse polarity protection and connective removable terminal block for master and slave power
- Supports 6000 VDC Ethernet ESD protection
- · -40 to 75 degrees C operating temperature



With the long fiber distance support, the IGUP-805AT still sustains the transmission performance as high as 1000Mbps. It works in the high-performance Store and Forward mechanism, and also can prevent packet loss with IEEE 802.3x flow control. Furthermore, it can immediately alarm the administrators the issue from the link media and provide efficient solution to monitor the network power usage.

Plug and Play High Power Sourcing Solution

Complying with the IEEE 802.3bt Power over Ethernet Plus Plus technology, the IGUP-805AT provides up to 95 watts of PoE output power, tripling that of the earlier 802.3at plus. Through the Legacy function in the DIP switch design, it is also backward compatible with 802.3af/at PoE standards to allow users to flexibly deploy standard and high powered devices simultaneously with no need of software configuration. With data and Power over Ethernet from one unit, the IGUP-805AT can reduce cable deployment and eliminate the need for dedicated electrical outlets on the wall, ceiling or any unreachable place.



Interactive Network Detection

The IGUP-805AT can support LFPP (Link Fault Passthrough PoE Control) function via its built-in DIP switch. It disables PoE port once it detects the fiber optic link is down. It can immediately alarm the administrators the issue from the link media and provide efficient solution to monitor the remote network.





Convenient and Reliable Power System

To facilitate the 802.3bt power PoE++ usage with the commonly-used **12-48V DC** power input for transportation and industrial-level applications, the IGUP-805AT adopts the **12-48V DC to 54V** 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.



Environmentally Hardened Design for Industrial PoE Networks

The IGUP-805AT is specifically designed with durable components and strong housing to operate reliably in electrically harsh and climatically demanding environments like plant floors or curbside traffic control cabinets. The IGUP-805AT 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 IGUP-805AT 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 wide temperature range of -40 to 75 degrees C, so it can be placed in almost any location.



Optional installation method