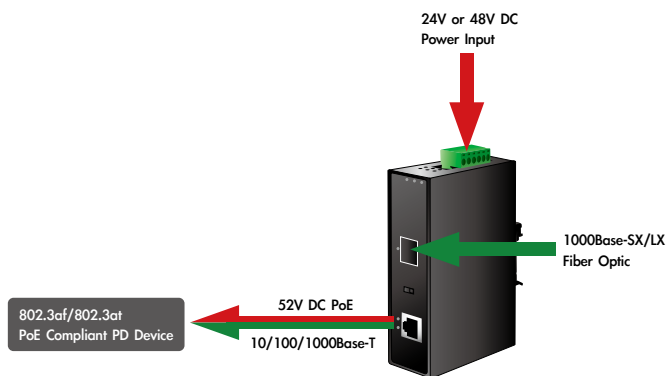


## 1000Base-SX / LX to 10/100/1000Base-T 802.3at PoE Industrial Media Converter



PLANET IGTP-80xT Industrial Gigabit Media Converter series combines Ethernet media conversion (from 1000Base-X to 10/100/1000Base-T) with 802.3at High Power over Ethernet (PoE) injector delivered in an IP30 rugged strong case. Particularly designed for network equipment requiring sufficient and reliable power input, the IGTP-80xT series supports up to 30 watts of power output and data transmission both delivered to remote powered devices over a single Ethernet cable. Its 1000Base-X fiber optic uplink port provides long distance, high speed and stable data transmission to remote core network. The special and convenient power system of the IGTP-80xT series supports 24/48V DC power inputs for power redundancy and operational flexibility.

Being able to operate under the temperature ranging from -40 to 75 degrees C, the IGTP-80xT series can be placed in almost any difficult environment.



**24V/48V DC to 52V DC PoE Power Boost**

**1000Base-SX/LX to 10/100/1000Base-T Media Converter**

### Fiber-Optic Link Capability Extends the Range of Network Deployment

The maximum distance between the PoE PSE (Power Sourcing Equipment) and PD (Powered Device) via Ethernet cable is 100 meters. To extend the PoE deployment range, the IGTP-80xT series is integrated with fiber interface for farther distance applications. The IGTP-80xT series and its respective fiber connecting type include:

- **IGTP-802T:** SC type multi-mode fiber interface, transmission distance up to 220m and 550m
- **IGTP-802TS:** SC type single mode fiber interface, transmission distance up to 10km

### Physical Port

- 1-Port 10/100/1000Mbps RJ-45 interface, auto-negotiation and auto MDI / MDI-X
  - 1-Port Data + Power output, 802.3af / 802.3at PoE standard compatible
  - 10/100/1000Base-T: 1-Port Cat. 5/5e/6 UTP cable, up to 100 meters
- 1-Port Gigabit Fiber Interface
  - IGTP-802T: SC Fiber Interface
  - IGTP-802TS: SC Fiber Interface
  - IGTP-805AT: LC Fiber Interface (Varying on SFP Module, 100/1000 dual mode support)

### Hardware

- LED Indicators
  - System: Power 1, Power 2 and Fault LED
  - Fiber port: LNK / ACT
  - 10/100/1000Base-T port: LNK / ACT, PoE In-use
- DIP switch: LFP (Link Fault Pass-through) mode selection

### IEEE 802.3af / 802.3at PoE

- Complies with IEEE 802.3af and IEEE 802.3at standard, End-Span PSE
- 24V / 48V DC Power Input for PoE
- Provides DC 52V power over RJ-45 Ethernet cable to devices with Ethernet port
- Supports PoE Power up to 30 watts for PoE port
- Auto-detects PoE IEEE 802.3at / IEEE 802.3af equipment, protecting the devices from being damaged by incorrect installation
- Remote power feeding up to 100m
- IEEE 802.3at / IEEE 802.3af splitter devices compatible

### Industrial Case / Installation

- IP30 aluminum metal case protection
- DIN Rail and wall mount design
- 24 and 48V DC, redundant power with polarity reverse protect function and connective removable terminal block for master and slave power
- Supports EFT protection 6000V DC for power line
- Supports 6000V DC Ethernet ESD protection-40 to 75 degrees C operating temperature

- **IGTP-805AT:** SFP slot supporting 100Base-FX / 1000Base-X Multi / Single Mode SFP module, transmission distance up to 120km (Varying on SFP module)

With the long fiber distance support, the IGTP-80xT series still sustains the transmission performance as high as 1000Mbps. It works in high performance Store and Forward mechanism, and also can prevent packet loss with IEEE 802.3x Flow Control and the LFP (Link Fault Pass-through function) function in the DIP Switch design. Furthermore, it can immediately alarm the administrators the issue from the link media and provide efficient solution to monitoring the network power usage.

*Plug and Play High Power Sourcing Solution*

Complying with the brand-new IEEE 802.3at High Power over Ethernet technology, the IGTP-80xT series provides up to 30 watts of output power that doubles PoE power, more than the conventional 802.3af PoE currently. It is also backward compatible with 802.3af 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 IGTP-80xT series can reduce cable deployment and eliminate the need for dedicated electrical outlets on the wall, ceiling or any unreachable place.

*Convenient and Reliable Power System*

To facilitate the 802.3at High Power PoE usage with commonly used 24V DC or 48V DC power input for transportation and industrial-level applications, the IGTP-80xT series adapts 24/48V to 52V power boost technology to solving power source issue without the need for special power supplies. The IGTP-80xT series provides an integrated power supply with a wide range of voltages (24V / 48V DC) for worldwide operability. It also provides dual-redundant, reversible polarity 24V / 48V DC power supply inputs for high availability applications.

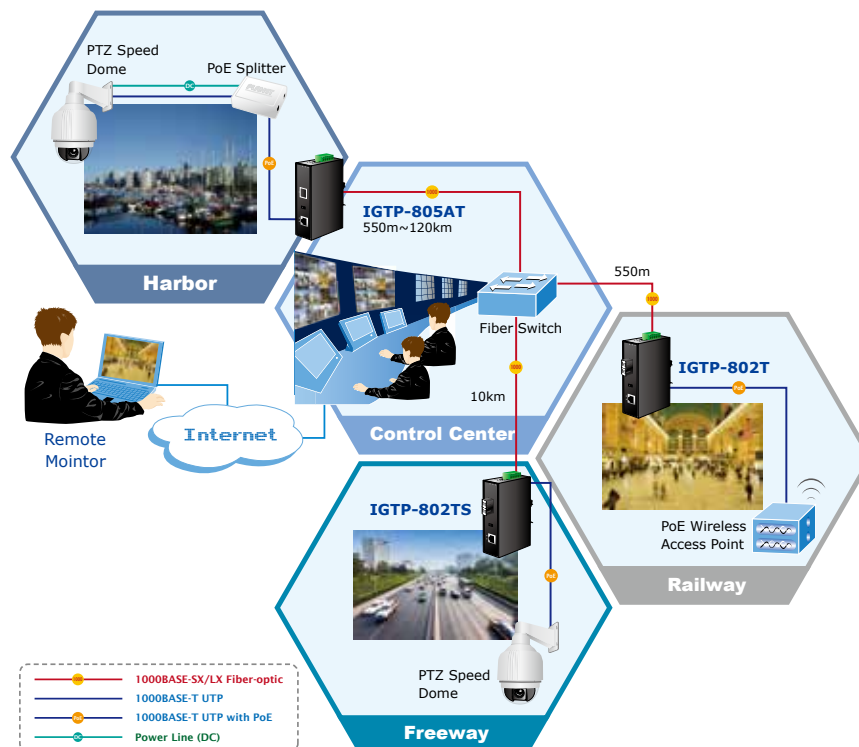
*Environmentally Hardened Design for Industrial PoE Networks*

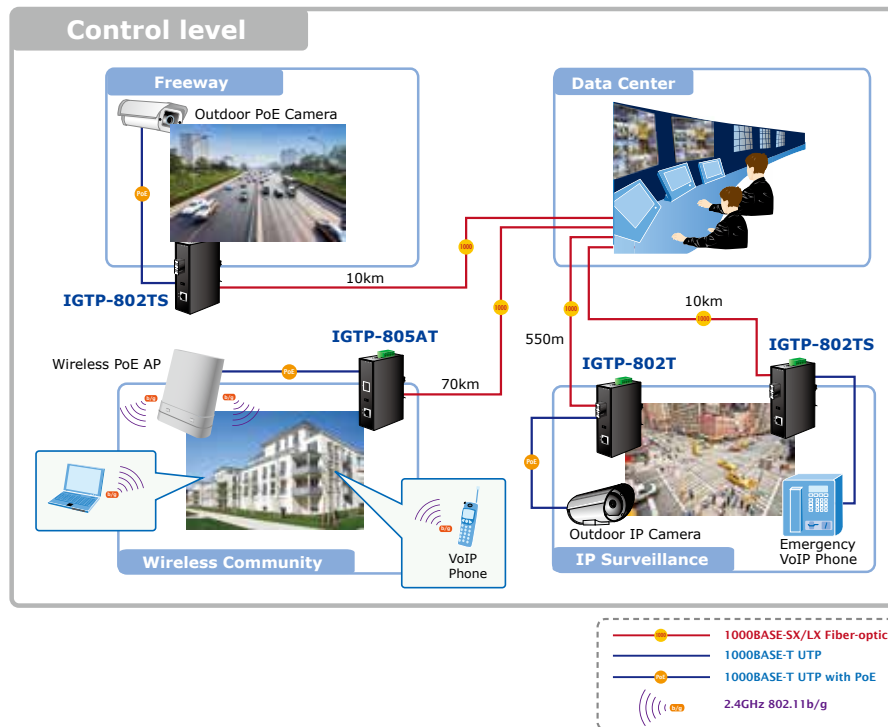
The IGTP-80xT series is specifically designed with durable components and strong housing case to operate reliably in electrically harsh and climatically demanding environments like plant floors or curbside traffic control cabinets. The IGTP-80xT series is packaged in a compact, IP30 rugged strong case that allows either DIN-Rail or wall mounting to have the efficient use of cabinet space. With IP30 rugged strong case protection and PoE design, the IGTP-80xT series is ideal for service providers, campuses and public areas to deploy the 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.

## Applications

*Flexible and User-friendly PoE Deployment with Gigabit Fiber Extension*

For the places difficult to find the power outlet, the IGTP-80xT series 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) wireless LAN access points and other network devices that need higher power to function normally. For instance, users can flexibly install the 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.



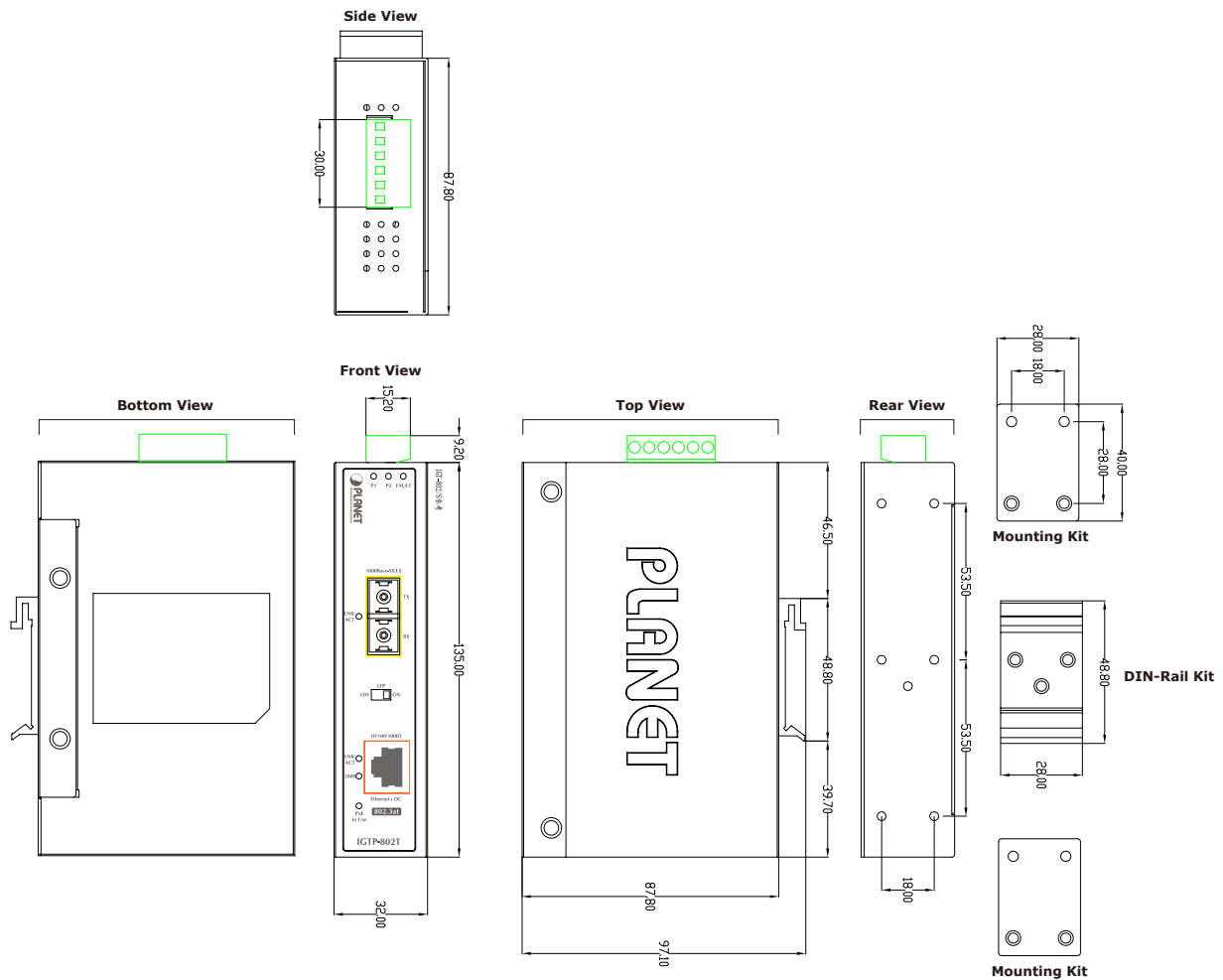


## Specifications

Hardware Specifications	
10/100/1000Base-T Port	1-Port RJ-45 interface, auto-negotiation and auto MDI / MDI-X
1000Base-X Fiber Interface	IGTP-802T: SC IGTP-802TS: SC IGTP-805AT: SFP (LC)
Fiber Cable	<b>IGTP-802T:</b> Multi-mode: 50/125µm or 62.5/125µm optic fiber <b>IGTP-802TS:</b> Single-mode: 9/125µm optic fiber <b>IGTP-805AT:</b> Vary on SFP Module
Cable Distance	IGTP-802T: 220m / 550m IGTP-802TS: 10km IGTP-805AT: Vary on SFP Module
Optical Frequency	IGTP-802T: 850nm IGTP-802TS: 1310nm IGTP-805AT: Vary on SFP Module
Launch Power	<b>IGTP-802T:</b> Max. -4dBm Min. -9.5dBm <b>IGTP-802TS:</b> Max. -3dBm Min. -9.5dBm <b>IGTP-805AT:</b> Vary on SFP Module
Receive Sensitivity	IGTP-802T: -13.5dBm IGTP-802TS: -14.4dBm IGTP-805AT: Vary on SFP Module
Maximum Input power	IGTP-802T: -18dBm IGTP-802TS: -20dBm IGTP-805AT: Vary on SFP Module
IEEE 802.3at / 802.3af PoE Port	1, End-Span, 1/2(+), 3/6(-)

LED Indication	<p><b>System:</b> Power 1, Power 2 and Fault LED (Green)</p> <p><b>Fiber port:</b> LNK / ACT (Green)</p> <p><b>10/100/1000Base-T port:</b> LNK / ACT, PoE In-use (Green / Orange)</p>
Link Fault Pass-through DIP Switch	ON / OFF
Flow Control	Back pressure for half duplex, IEEE 802.3x Pause Frame for full duplex
Maximum Frame Size	9216 bytes
Power Requirements	24V DC or 48V DC, redundant power with polarity reverse protect function
Enclosure	IP30 aluminum metal case
Dimensions (W x D x H)	135 x 87 x 32mm
Weight	IGTP-802T / IGTP-802TS: 510g IGPT-805AT: 500g
Installation	DIN rail kit and wall mount ear
ESD Protection	6KV DC
EFT Protection	6KV DC
Alarm	Provides one relay output for power fail Alarm Relay current carry ability: 1A @ DC 24V
Speed	<p><b>Twisted-pair:</b> 10/20Mbps for Half / Full-Duplex, 100/200Mbps for Half / Full Duplex 1000/2000Mbps for Full Duplex</p> <p><b>Fiber-Optic:</b> 200Mbps / 2000Mbps for Full-Duplex</p>
Network Cables	<p><b>10/100/1000Base-T:</b> 2-Pair UTP Cat. 3, 4, 5, 5e, 6 (Maximum 100 meters) EIA / TIA-568 100-ohm STP (Maximum 100 meters)</p> <p><b>100Base-FX / 1000Base-SX / LX:</b> Multi-mode: 50/125µm or 62.5/125µm optic fiber Single-mode: 9/125µm optic fiber</p>
Power Consumption	<b>24V:</b> 33 watts / 112BTU, <b>48V:</b> 31 watts / 105BTU (With PoE)
<b>Power over Ethernet</b>	
PoE Standard	IEEE 802.3af / 802.3at High Power over Ethernet / PSE
PoE Power Supply Type	End-Span
PoE Power Output	52V DC. 15.4 watts 52V DC. 30 watts
Power Pin Assignment	1/2(+), 3/6(-)
<b>Standards Conformance</b>	
Standards Compliance	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX / FX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3z 1000Base-SX / LX Gigabit Ethernet IEEE 802.3x Full-Duplex Flow Control
Regulation Compliance	FCC Part 15 Class A, CE
Stability Testing	IEC60068-2-32(Free fall) IEC60068-2-27(Shock) IEC60068-2-6(Vibration)
<b>Environmental Specifications</b>	
Temperature	Operating: -40~75 degrees C Storage: -40~75 degrees C
Humidity	Operating: 5~90% (non-condensing) Storage: 5~90% (non-condensing)

## Dimension



Dimensions ( unit = mm )

## Ordering Information

IGTP-802T	1000Base-SX to 10/100/1000Base-T 802.3at PoE Industrial Media Converter (SC,MM) -550m
IGTP-802TS	1000Base-LX to 10/100/1000Base-T 802.3at PoE Industrial Media Converter (SC,SM) -10km
IGTP-805AT	1000Base-SX / LX to 10/100/1000Base-T 802.3at PoE Industrial Media Converter (mini-GBIC, SFP)

## Related Products

IAP-2000PE	Industrial 802.11n Wireless Access Point
ICA-HM126	H.264 Full HD Box IP Camera
MFB-Series Transceiver	100Base-FX SFP Transceiver
MGB-Series Transceiver	1000Base-SX/LX SFP Transceiver
POE-162S	IEEE 802.3at Gigabit High Power over Ethernet Splitter
POE-E201	IEEE 802.3at Power over Gigabit Ethernet Extender
WNAP-1120PE	802.11n Wireless Access Point with PoE

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