Industrial 10G SFP+ + 1-Port 10GBASE-T 802.3bt PoE++ Managed Media Converter

Ultra-fast Connections, Secure Management and Powerful IEEE 802.3bt Compatibility

PLANET Industrial **IXT-900 PoE series** media converter is a robust network device, suitable for extreme conditions with a temperature range of **-40 to 75°C**. It not only offers **10G high-speed connectivity** and media conversion but also features advanced 95-watt **IEEE 802.3bt Type 4 power delivery** on its copper port, facilitating installations without extra power sources for devices such as IP cameras.

This converter excels in **remote management** as it is equipped with secure, standalone management features for remote enterprise and telecom operations. It supports a **web interface**, **command line interface (CLI)**, and **SNMP** for comprehensive, remote monitoring and management.

Featuring a **10GBASE-T** copper port and **10G SFP+ ports**, it combines the advantages of 10G connectivity with the versatility of fiber and copper ports. Compact yet powerful, the **IXT-900 PoE series** is an ideal choice for businesses seeking to enhance their network speed and flexibility. This makes it a go-to option for modern network upgrades.

10GBASE-T with 95W PoE++ Capability and 10GBASE-X SFP+

The **IXT-900 PoE series** delivers a speed of up to 10Gbps over both copper and fiber-optic cabling, enhancing data transmission efficiency. Its **10GBASE-T copper** interfaces with 5-speed auto-negotiation (10G/5G/2.5G/1G/100M) allow for high-speed data transfer over the existing Cat6/Cat6A cabling, avoiding costly upgrades. Furthermore, its IEEE 802.3bt compatibility enables direct powering of **Wi-Fi 7** APs, adding to its versatile network capabilities.

Physical Port

- One 10G/5G/2.5G/1G/100BASE-T RJ45 interface with auto MDI/MDI-X function
- One (Two) 10G/2.5G/1G/100BASE-X SFP+ interface
- Support IEEE 802.3bt PoE++ standard

IEEE 802.3bt Power over Ethernet

- Compliant with IEEE 802.3bt Type-4 PoE++ standard
- Backward compatible with IEEE 802.3af/at PD device
- The RJ45 port on the IXT-900 PoE series delivers a maximum power output of 95 watts, which is also the maximum PoE budget the device can provide.
- Detects powered devices (PD) automatically.
- Power feeding up to 100m
- PoE management features
  - PoE admin-mode control
  - PoE port power limit
  - PD classification detection
- Intelligent PoE features
  - Temperature threshold setting
  - PoE usage threshold setting
  - PD alive check
  - PoE schedule

Layer 2 Features

- Storm Control support
  - Broadcast / Multicast / Unknown Unicast
- Supports VLAN
  - IEEE 802.1Q tagged VLAN.
  - Supports provider bridging (VLAN Q-in-Q, IEEE 802.1ad)
  - Up to 256 VLAN groups, out of 4096 VLAN IDs
- Supports ITU-T G.8032 ERPS ring with recovery time less than 500ms (software-based)
- Link Layer Discovery Protocol (LLDP)
- 16K MAC address table with auto-aging
- Jumbo Frame support up to 9K in size.

The fiber-optic **10GBASE-X SFP+** interfaces support 4 speeds, 10GBASE-SR/LR, 2500BASE-X, 1000BASE-SX/LX and 100BASE-FX, meaning the administrator now can flexibly choose the suitable SFP/SFP+ transceiver according to the transmission distance or the transmission speed required to extend the network efficiently.

802.3bt PoE++ and Advanced PoE Power Output Mode Management

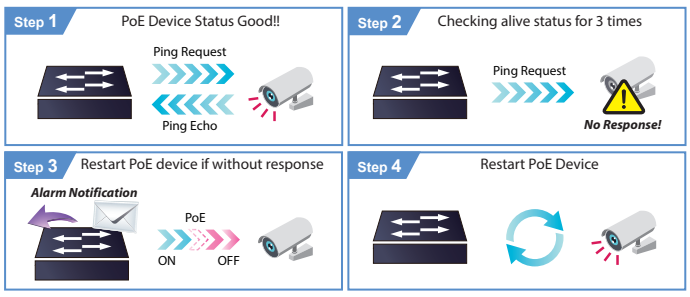
To meet the demand for supplying stable PoE power to powered device, the IXT-900 PoE series offers five different PoE power output modes for selection.

- **95W 802.3bt PoE++ Power Output Mode**
- **95W Force Power Output Mode**
- **95W Legacy Power Output Mode**
- **36W End-span PoE Power Output Mode**
- **36W Mid-span PoE Power Output Mode**

Intelligent Alive Check for Powered Devices

The IXT-900 PoE series can be configured to monitor the status of connected powered devices (PDs) in real time through ping action. If a PD stops working and responding, the IXT-900 PoE series will recycle the PoE port power and bring the PD back to working condition. This greatly enhances reliability, as the assigned PoE port automatically reboots the PD, reducing the administrator's management burden.

PD Alive Check



Quality of Service

- Ingress Shaper and Egress Rate Limit per port bandwidth control
- 8 priority queues on all converter ports
- Strict priority and Weighted Round Robin (WRR) CoS policies
- Traffic classification
  - IEEE 802.1p CoS
  - IP TOS / DSCP / IP Precedence
  - IP TCP/UDP port number
  - Typical network application

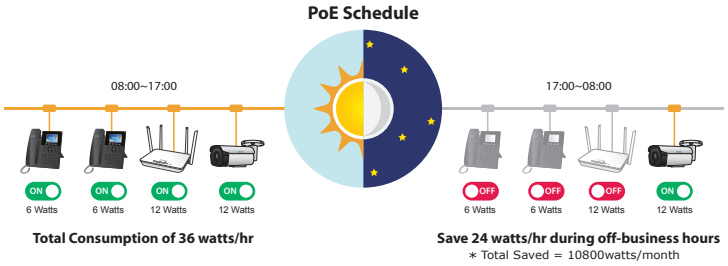
Management

- IPv4 and IPv6 dual stack management
- Supports Link Fault Pass-through
- Supports Link Fault PoE Pass-through
- Management Interfaces
  - Web HTTP/HTTPS management
  - Telnet Command Line Interface
  - SNMPv1, v2c, v3 monitoring
  - SSHv2, TLSv1.2
- System Maintenance
  - Firmware upload/download via HTTP
  - Reset button for system reboot or reset to factory default.
  - Dual images
- Simple Network Time Protocol (SNTP)
- User privilege levels control
- SNMP Management
  - SNMP trap for interface link up and link down notification.
  - Four RMON groups (history, statistics, alarms, and events)
- Network Diagnostic
  - SFP-DDM (Digital Diagnostic Monitor)
- Syslog remote alarm
- Local system Log
- ICMPv6 / ICMPv4 remote ping
- PLANET Smart Discovery Utility for convenient deployment
- PLANET Remote Management
  - PLANET NMS Controller and CloudViewerPro app for central management

PoE Scheduling to Save Energy

By implementing the "PoE schedule" function, businesses can reduce their energy consumption during non-business hours or periods of low network usage. This not only helps to reduce energy costs but also minimizes the overall carbon footprint of the organization.

Furthermore, the IXT-900 PoE series' PoE scheduling feature provides a convenient and easy-to-use interface for managing power usage. The user can easily set the time intervals for each PoE port, allowing for more efficient power management.



Security

- IP address access management to prevent unauthorized intruder.
- Static MAC setting and MAC Filtering
- Protected ports

Case and Installation

- Dual 12~54VDC external power supply
- -40 to 75°C operating temperature
- Supports 4KVDC Contact / 8KVDC Air Ethernet ESD protection.
- Wall-mount and DIN-rail installation

Scheduled Power Recycling

The IXT-900 PoE series enables connected PoE IP cameras or PoE wireless access points to reboot at a specific time each week. This will reduce the chance of IP camera or AP crashes resulting from buffer overflow.

Two Fiber Optic Ports Double the Distance of Deployment

Conventional media converters typically support only a single pair of different media conversions, such as converting one fiber to one copper connection. They can extend a 100m copper connection to a maximum of 80km fiber optic connection. In contrast, the IXT-900 PoE series has two fiber optic ports and one copper port, enabling the two fiber optic cables to connect to devices up to 160km apart to significantly extend the deployment distance.