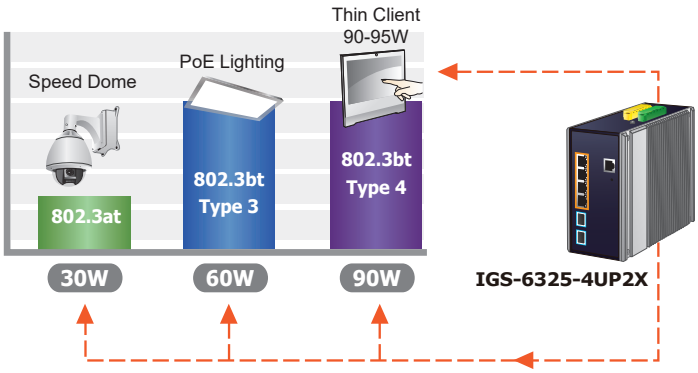


802.3bt PoE++ and Advanced PoE Power Output Mode Management

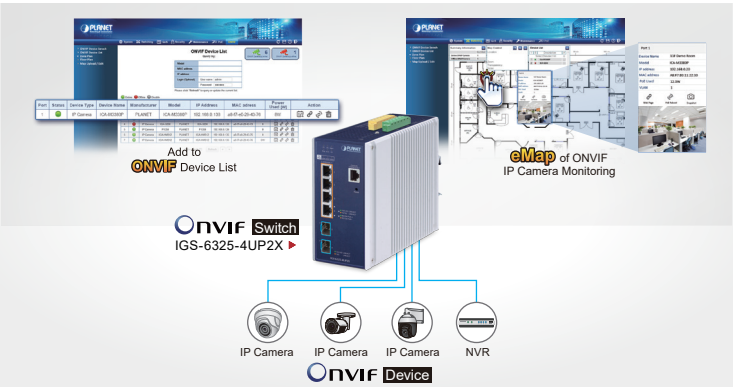
To meet the demand for supplying stable PoE power to various powered devices, the IGS-6325-4UP2X Switch offers five different PoE power output modes for selection.

- **90W 802.3bt PoE++ Power Output Mode** (Pins 1, 2, 3, 6 + Pins 4, 5, 7, 8)
- **95W UPOE Power Output Mode** (Pins 1, 2, 3, 6 + Pins 4, 5, 7, 8)
- **30W End-span PoE Power Output Mode** (Pins 1, 2, 3, 6)
- **30W Mid-span PoE Power Output Mode** (Pins 4, 5, 7, 8)
- **60W Force Power Output Mode** (Pins 1, 2, 3, 6 + Pins 4, 5, 7, 8)

ONVIF Support Allows Effective and Centralized Control Over IP-based Security Products

The IGS-6325-4UP2X switch offers ONVIF support as part of its versatile feature set for seamless integration with IP surveillance cameras. Through the switch's web GUI, users can easily search for and display all ONVIF-compliant devices on their LAN.

Users can also upload floor plans to the switch and place IP surveillance cameras on the plan for more intuitive planning and faster inspection in the future. Additionally, the web GUI provides real-time surveillance information, online/offline status, and the ability to remotely reboot cameras.



Intelligent Alive Check for Powered Devices

The IGS-6325-4UP2X 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 IGS-6325-4UP2X 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.

- Circuit protection prevents power interference between ports.
- Power feeding up to 100m
- PoE management features
  - Total PoE power budget control
  - Per port PoE function enable/disable
  - PoE admin-mode control
  - PoE port power feeding priority
  - Per PoE port power limit
  - PD classification detection
  - PoE extension mode to support power feeding up to a maximum distance of 160 meters.
- Intelligent PoE features
  - Temperature threshold setting
  - PoE usage threshold setting
  - PD alive check
  - PoE schedule

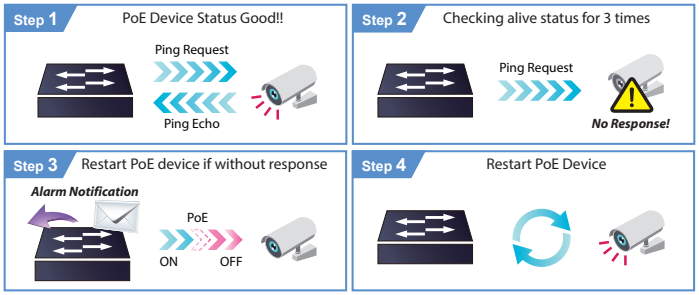
Layer 3 IP Routing Features

- IPv4 dynamic routing protocol supports RIPv2 and OSPFv2.
- IPv6 dynamic routing protocol supports OSPFv3.
- IPv4/IPv6 hardware static routing
- The routing interface provides a per-VLAN routing mode.

Layer 2 Features

- The Store-and-Forward architecture offers high performance, while the runt/CRC filtering eliminates erroneous packets to optimize network bandwidth.
- Storm control support
  - Broadcast/Multicast/Unknown unicast
- **VLAN** support includes:
  - IEEE 802.1Q tagged VLAN
  - Provider bridging (VLAN Q-in-Q IEEE 802.1ad)
  - Private VLAN Edge (PVE)
  - Protocol-based VLAN
  - MAC-based VLAN
  - Voice VLAN
  - GVRP (GARP VLAN Registration Protocol)
- Supports **Spanning Tree Protocol** including:
  - IEEE 802.1D Spanning Tree Protocol (STP)
  - IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
  - IEEE 802.1s Multiple Spanning Tree Protocol (MSTP), spanning tree by VLAN
  - BPDU Guard

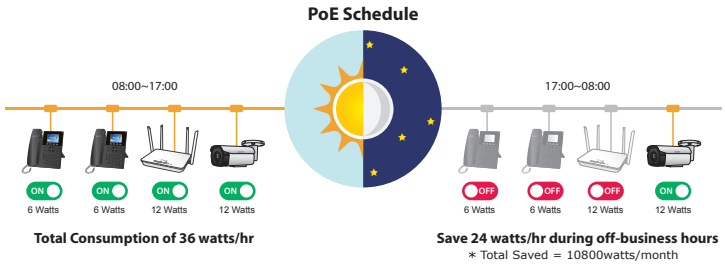
PD Alive Check



PoE Scheduling to Save Energys

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 IGS-6325-4UP2X's 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.



Scheduled Power Recycling

The IGS-6325-4UP2X 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.

Layer 3 Network Routing Support

The IGS-6325-4UP2X allows administrators to boost network efficiency by configuring Layer 3 IPv4/IPv6 VLAN static routing manually or automatically through the **Routing Information Protocol (RIP)** or **Open Shortest Path First (OSPF)** settings.

- Supports **Link Aggregation** including:
  - 802.3ad Link Aggregation Control Protocol (LACP: 6 ports/3 groups max.)
  - Cisco ether-channel (static trunk: 6 ports/3 groups max.)
- Provides port mirror (Many-to-1)
- Port mirroring to monitor the incoming or outgoing traffic on a particular port
- Loop protection to avoid broadcast loops
- Link Layer Discovery Protocol (LLDP)
- Compatible with Cisco Uni-Directional Link Detection (UDLD), which monitors a link between two switches and blocks the ports on both ends of the link if the link fails at any point between the two devices.
- Supports G.8032 ERPS (Ethernet Ring Protection Switching).
- Supports IEEE 1588v2 PTP (Precision Time Protocol) transparent clock mode.

Quality of Service

- Ingress shaper and egress rate limit per port bandwidth control
- 8 priority queues on all switch ports
- Traffic classification
  - IEEE 802.1p CoS
  - ToS/DSCP/IP Precedence of IPv4/Ipv6 packets
  - IP TCP/UDP port number
  - Typical network application
- Strict priority and Weighted Round Robin (WRR) CoS policies
- Supports QoS and In/Out bandwidth control on each port
- Traffic-policing on the switch port
- DSCP remarking
- Voice VLAN

Multicast

- Supports IPv4 IGMP snooping v1, v2 and v3
- Supports IPv6 MLD snooping v1 and v2
- Querier mode support
- IPv4 IGMP snooping port filtering
- IPv6 MLD snooping port filtering
- MVR (Multicast VLAN Registration)