

## Lantech IPES-3408GSFPM-PT

8 10/100TX PoE at + 4 1000M SFP L2+ Industrial Managed Switch

IEC 61850-3 & IEEE1613 compliance

Goose monitoring; Built-in MMS server for power SCADA

Support IEEE802.3at/af up to 30W per port

PoE management incl. Detection and Scheduling

ITU G.8032 standard ring protection < 20ms incl. data & multicast packets; co-exist with RSTP

Support PTP IEEE1588 v2 (under 1 $\mu$ s)

Miss-wiring avoidance & Repowered auto ring restore (node failure protection)

User friendly UI, including auto topology drawing and DDM threshold monitoring with dB values;  
Complete CLI

Support LACP link aggregation, IGMP v3/router port, DHCP server, Port & VLAN based DHCP distribution, DHCP Option 82, SSH/SSL, TACAS+, ACL, IPv6, SMS

Environmental Monitoring for temp., voltage & current

10KB jumbo frame/ 2xDIDO

Lantech IPES-3408GSFPM-PT is a high performance L2+ (Gigabit uplink) switch with 8 10/100TX + 4 1000M SFP w/8 PoE 802.3af/at Injectors that complies with IEC 61850-3 & IEEE 1613. It delivers ITU G.8032 ring recovery less than 20ms, comprehensive QoS, advanced security including ACL L2/L3, SSH/SSL, DHCP Option 82, DHCP server, IGMPv1/v2/v3/router port, QinQ (double tag VLAN) , and MVR (multicast VLAN registration), which are important features required in large network. It also supports Cisco Discovery Protocol (CDP) and LLDP for Ciscoworks to detect the switch info and show on L2 map topology.

Compliant with 802.3af/at standard, the Lantech IPES-3408GSFPM-PT is able to feed each PoE port up to 30 Watts@54 VDC providing the connected PD devices. Lantech IPES-3408GSFPM-PT supports advanced PoE management including PoE detection and scheduling. PoE detection can detect if the connected PD is hang up then restart the PD; PoE scheduling is to allow pre-set power feeding schedule upon routine time table. Each PoE ports can be enabled /disabled, get the voltage, current, Watt, and temperature info displayed on WebUI.

The exclusive GOOSE monitoring function (IEC packet) can display the counter of GOOSE message transmitted and received by port. The built-in MMS (Manufacturing Messaging Specification) server can help power SCADA to monitor and control switch by data modeling.

The IPES-3408GSFPM-PT also embedded several features for stronger and reliable network protection in an easy and intuitive way. When the pre-set ring configuration failed or looped by miss-wiring, Lantech IPES-3408GSFPM-PT is able to alert with the LED indicator and send out an email,

traps or a SMS text. Repowered auto ring restore function (node failure protection) ensures the switches in a ring to survive after power breakout is back. The status can be shown in NMS when each switch is back. This feature prevents the broken ring and keep ring alive without any re-configuration needed. Loop protection is also available to prevent the generation of broadcast storm when a dumb switch is inserted in a closed loop connection.

DHCP option 82 and relay agent function (port & vlan based DHCP distribution) can offer the same IP address on port base or vlan base where there is need to replace the new device connecting to Lantech switches to avoid any network disruption.

The user friendly UI, innovative auto topology drawing and topology demo makes IPES-3408GSFPM-PT much easier to get hands-on. The switch also equips the RTC (real time clock) which can keep track of time always. The IPES-3408GSFPM-PT supports DMI interface that can correspond with DDM SFPs (Digital diagnostic monitor) to display the five parameters in Lantech's UI, including optical output power, input power, temperature, laser bias current and transceiver supply voltage. The TX power/RX power raw data is automatically converted to dB values for installer, making it easier to calculate the fiber distance. The complete CLI enables professional engineer to configure setting by command line.

Lantech IPES-3408GSFPM-PT features ITU G.8032 ring which can be self-healed in less than 20ms for ring/chain topologies which covers data & multicast packets protection. The innovative auto-Ring configurator (auto mode) can calculate owner and neighbor in single ring which makes ITU G.8032 ring setup never been easier. It supports MSTP that allows RSTP over Vlan for redundant links. The ITU G.8032 Ring and RSTP can be co-existed in the same switch with different ports for the most flexible protection.

The configuration file of Lantech IPES-3408GSFPM-PT can be exported in text file so that it can be edited and configured back to switch with ease for mass deployment. The factory reset button can restore the setting back to factory default and built-in watchdog design can automatically reboot the switch when CPU is found dead.

The IPES-3408GSFPM-PT DIDO function can support additional open/close physical contact for designate applications besides Port / Power events, for example, DIDO function can trigger alarm if the switch was moved or stolen. In case of events, the IPES-3408GSFPM-PT will immediately send an email & SMS text message to pre-defined addresses as well as SNMP Traps out. It provides 2DI and 2DO while disconnection of the specific port was detected; DO will activate the signal LED to alarm. DI can integrate the sensors for events and DO will trigger the alarm while sending alert information to IP network with email and traps.

The environmental monitoring can detect switch overall temperature, voltage and current where can send the SNMP traps, email and SMS alert when abnormal.

The Lantech IPES-3408GSFPM-PT has two isolated PoE power inputs from DC45~56V. Featured with relay contact alarm function, the IPES-3408GSFPM-PT is able to connect with alarm system in case of power failure. The IPES-3408GSFPM-PT also provides 4KV EFT, 4KV surge and 8KV contact / 15KV air ESD protections, which can reduce unstable condition caused by power line and Ethernet. It features high reliability and robustness coping with extensive EMI/RFI phenomenon, surge, inductive load switching environment usually found in substation, steel automation, mining and process control.

Widely operational temperature capacity (standard model: -20°C~60°C / -E model: -40°C~75°C) ensures the IPES-3408GSFPM-PT runtime through the harsh environment.

