

## **Lantech IES-3408GSFPM-PT**

4 1000 SFP +8 10/100TX L2+ Industrial IEC61850-3 Switch w/ ITU G.8032 Ring

IEC61850-3 & IEEE1613 compliance Goose monitoring; Built-in MMS server for SCADA

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

Support ACL L2/L3, IGMP v3/router port, Static multicast forwarding, MVR, QinQ, SSH/SSL, TACAS+, SMS alert

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

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

Environmental Monitoring for temp. voltage & current

1500VDC Isolated Power /10KB jumbo frame/2xDIDO

Lantech IES-3408GSFPM-PT is a high performance L2+ industrial switch which provides 8x10/100TX + 4 Giga SFP uplinks 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, TACAS+, SSH/SSL, DHCP Option 82 and IGMPv1/v2/v3 & router port, QinQ (double tag VLAN) , 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.

Lantech IES-3408GSFPM-PT ITU G.8032 ring/double ring/chain which can be self-healed in less than 20ms up to 256 switches that covers data & multicast packets protection. It also supports MSTP that allows RSTP over Vlan for redundant links. The embedded WEB UI supports auto topology drawing when the switches are connected in a ring in which each node's detail can be shown in the drawing. Auto configurator (auto mode) for ITU ring is to calculate owner, neighbor and others automatically without manual setting to avoid loop. It can co-exist with RSTP for different ports to provide the most flexible protection.

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

The IES-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 IES-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.

The user friendly UI, innovative auto topology drawing and topology demo makes IES-3408GSFPM-PT much easier to get hands-on. The IES-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 configuration file can also be exported in text file so that it can be edited and configured back to switch with ease for mass deployment. The InstaConfig can set configuration with multiple switches at one time for mass deployment. The factory reset button can reset the setting back to factory default and built-in watchdog design can automatically reboot the switch when cpu is found dead.

The IES-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 IES-3408GSFPM-PT will immediately send an email 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, traps or SMS text.

The environmental monitoring can detect switch overall temperature, voltage and current where can send the SNMP traps, email and SMS alert when abnormal. The built-in RTC (real time clock) can keep track of time always.

Lantech IES-3408GSFPM-PT has two isolated DC 24~48V power input and HV model offers one isolated 90~305VAC/100~370VDC power supply. Featured with relay contact alarm function, the IES-3408GSFPM-PT is able to connect with alarm system in case of power failure. The IES-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.

Lantech IES-3408GSFPM-PT features high reliability and robustness compliant with extensive EMI/RFI phenomenon, surge, inductive load switching environment usually found in Substation, Steel automation, Mining and Process control. Widely operational temperature capacity (-E-40°C ~ 75°C) ensures IES-3408GSFPM-PT-HV runtime through the harsh environment.

