## Lantech I(P)GS-5400-2P-PT

4 Modular Slots Industrial L2+ Managed (PoE) Switch

High-density 28 x Gigabit Ethernet L2+ managed (PoE at/af) switch

Supports ITU G.8032 ring, double ring, chain < 20ms; MSTP

Supports PTPv2 (under 1µs) IEEE 1588 and built-in RTC (Real Time Clock) Advanced Management with ACL, IGMPv3, QinQ, SSH/SSL,TACAS+,IPv6

Supports wide operating temperature from -40°C to 75°C (-E), Environmental monitoring

Miss-wiring avoidance & Repowered auto ring restore

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

GOOSE monitoring & MMS built-in

IEC 61850-3, IEEE1613 compliant

Support USB dongle for automatic backup configuration

Lantech I(P)GS-5400-2P-PT is a high performance L2 + managed industrial switch which provides L2 wire speed and advanced security function for network aggregation and backbone deployment. It delivers ITU G.8032 ring recovery less than 20ms, comprehensive QoS, advanced security including ACL, TACAS+, SSH/SSL, DHCP Option 82 and IGMPv1/v2/v3 & routing, 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.

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 highly flexible modular design consisting of maximum 24x Gigabit T+4Giga/100M SFP,24x Giga PoE at/af (IPGS-5400-2P)+4Giga/100M SFP, 28xGigabit/100M SFP, 18x100M ST/SC + 4 Gigabit SFP with PTP v2 function covers the widest deployment of applications.

Lantech I(P)GS-5400-2P-PT features ITU G.8032 ring/chain which can be self-healed in less than 20ms up to 256 switches that covers data & multicast packets protection for various topologies. It also supports MSTP that allows RSTP over Vlan for redundant links.

The I(P)GS-5400-2P-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 I(P)GS-5400-2P-PT is able to alert with the LED indicator and send out an email, traps or a SMS text. Repowered auto ring restore function 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 I(P)GS-5400-2P-PT much easier to get hands-on. The I(P)GS-5400-2P-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.

Lantech I(P)GS-5400-2P-PT designs with two firmware and OS where can survive if the primary firmware is crashed or to select which firmware/OS to run with. 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 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. I(P)GS-5400-2P-PT can automatically back up the configuration or write the configuration into/from USB dongle without any notebook setup.

Lantech I(P)GS-5400-2P-PT model features hardware-based PTP IEEE1588 v2 function which can allow each modules Gigabit, PoE or 100FX to synchronize the network with precise accuracy (under 1µs). It has RTC (Real Time Clock) inside that can keep track of current time.

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

