

## Lantech IGS-5424-PT

24 10/100/1000T + 4 Dual Speed SFP L2+ Industrial Managed Switch w/PTP V2

IEC 61850-3 & IEEE1613 compliance

Goose monitoring; Built-in MMS server for power SCADA

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

Support PTP IEEE1588 v2 (under 1μs)

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

USB slot for edited restoration and auto backup

Lantech IGS-5424-PT is a high performance L2 + managed IEC61850-3 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 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.

The exclusive GOOSE monitoring function (IEC packets) 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 ITU G.8032 ring protection features self-healing in less than 20ms up to 256 switches that covers data & multicast packets protection for various topologies. Co-existence with RSTP on different ports provides the most flexible 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 mode for single ring configuration is to calculate owner, neighbor and others automatically that makes the setup never been easier.

The IGS-5424-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 IGS-5424-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 when power back. 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 IGS-5424-PT much easier to get hands-on. The IGS-5424-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 support allows professional setting.

Lantech IGS-5424-PT model features hardware-based PTP IEEE1588 v2 function which can allow each Gigabit port to synchronize the network with precise accuracy (under 1 $\mu$ s). The built-in RTC (realtime clock) can keep track of time.

The exclusive environmental monitoring function provides real-time status for input voltage, current, total PoE load and case ambient temperature where can set SMS text, email or trap alert when abnormal.

The configuration file of Lantech IGS-5424-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 USB slot allows user to backup/ restore configuration.

The IGS-5424-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 IGS-5424-PT will immediately send an email, SMS text 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 into the auto alarm system and transfer the alarm information to IP network with email, text and SNMP.

Lantech IGS-5424-PT supports dual power inputs from DC9.5~60V or HV 85~265AC/100~370VDC. It features high reliability and robustness withstanding extensive EMI/RFI phenomenon, lighting surge, inductive load switching, high ESD, high fault current environment usually found in Substation, Steel automation, Mining and Process control etc. IGS-5424-PT can run under widely operational temperature (-20°C~60°C) in the harsh environment.

