## Lantech IES-5408F

4 100M FX +8 10/100TX L2 +Industrial Managed Switch w/ ITU G.8032 & Pro-Ring IIs

IEC61850-3 & IEEE1613 compliant

Support ITU G.8032 ring protection < 10ms & Pro-Ring IIs self healing recovery < 20ms & MSTP

Support ACL, IGMP v3, QinQ, SSH/SSL, TACAS+, IPv6

Supports PTP IEEE1588 v2 (under 1µs)

Environmental Monitoring for temp. voltage & current

Supports DIDO (Digital Input/Digital Output) & DDM for SFP

1500VDC Isolated Power /10KB jumbo frame

Lantech IES-5408F is a high performance L2+ industrial switch which provides 8x10/100TX + 4 100FX uplinks with hardware PTP v2 support that complies with IEC 61850-3 & IEEE 1613. It delivers Pro-Ring IIs self-recovery in less than 20ms, delivers ITU G.8032 ring protection < 10ms, Pro-Ring IIsself-recovery in less than 10ms, comprehensive QoS, advanced security including ACL, TACAS+, SSH/SSL, IGMPv3 & proxy, DHCP Option 82 and QinQ, MVR(multiple vlan registration) which are important features required in large network. It also supports Cisco Discovery Protocal (CDP) and LLDP for Ciscoworks to detect the switch info and show on L2 map topology.

The standard ITU G.8032 ring protection (over vLAN) can work with other metro switches for ring protection in less than 10ms which is faster than market products. Lantech Pro-Ring IIs can be self-healed in less than 10ms with single ring, multi ring and dual homing. It also supports MSTP that allows RSTP over Vlan for redundant links.

Lantech IES-5408F designs with redundant firmware where can survive if the primary firmware is crashed due to improper upgrading. The configuration file can also be exported in text file so that it can be edited and configured back to switch with ease. The factory reset button can restore the setting back to factory default and built-in watchdog design can automatically reboot the switch under certain circumstances.

The IES-5408F 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-5408F 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 and traps.

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

Lantech IES-5408F model features hardware-based PTP IEEE1588 v2 function which can allow 4x 100M FX uplinks to synchronize the network with precise accuracy (under  $1\mu s$ ).

The Lantech IES-5408F is designed with dual power input with 1500VDC isolation for  $\pm 24^{48}$ VDC. Featured with relay contact alarm function, the IES-5408F is able to connect with alarm system in case of power failure. The IES-5408F also provides 3000V EFT and 6000V ESD protections, which can reduce unstable condition caused by power line and Ethernet.

Lantech IES-5408F features high reliability and robustness compliant with extensive EMI/RFI phenomenon, lighting surge, inductive load switching environment usually found in Substation, Steel automation, Mining and Process control. Widely operational temperature capacity (-40°C~85°C) ensures IES-5408F runtime through the harsh environment.

