Lantech IPES-3416DSFP

16 10/100TX PoE at + 4 Dual Speed SFP L2+ Industrial Managed Switch w/ ITU G.8032

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

PoE management incl. Detection and Scheduling

12V input booster design to feed 48V output(12V model)

PTP 1588 v2 supported on fiber ports

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

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

Lantech IPES-3416DSFP is a high performance L2+ (Gigabit uplink) switch with 16 10/100TX + 4 100/1000M SFP w/16 PoE 802.3af/at Injectors which provides L2 wire speed and advanced security function for network aggregation 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.

Compliant with 802.3af/at standard, the Lantech IPES-3416DSFP is able to feed each PoE port up to 30 Watts@54 VDC providing the connected PD devices. Lantech IPES-3416DSFP 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. IPES-3416DSFP-12V is built with Booster technology that can accept input voltage from 12V ~ 48V and deliver PoE power at 48V to feed the PD with PoE budget 80W (12V input) or 120W (24V input).

Lantech IPES-3416DSFP features hardware-based PTP IEEE1588 v2 function which can allow 4 100/1000 SFP uplinks to synchronize the network with precise accuracy (under 1µs). It has RTC (Real Time Clock) inside that can keep track of current time.

The IPES-3416DSFP 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-3416DSFP 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-3416DSFP much easier to get hands-on. The switch also equips the RTC (real time clock) which can keep track of time always. The IPES-3416DSFP 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-3416DSFP 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-3416DSFP 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 without manually setup.

The IPES-3416DSFP 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-3416DSFP 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 optional 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-3416DSFP is designed with dual power supply at 12/24/48VDC. Featured with relay contact alarm function, the IPES-3416DSFP is able to connect with alarm system in case of power failure. The IPES-3416DSFP also provides ±4000V EFT and ±6000V ESD protection, which can reduce unstable situation caused by power line and Ethernet.

Lantech IPES-3416DSFP features high reliability and robustness coping with extensive EMI/RFI phenomenon, environmental vibration and shocks usually found in factory, substation, steel automation, aviation, mining and process control. It is the best solution for Automation, transportation, surveillance, Wireless backhaul, Semi-conductor factory and assembly lines.

The -E model can be used in extreme environments with an operating temperature range of -40°C to 75°C.

*Future Release

**Optional

***Optional DDM SFP required