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IES-3416DSFP

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16 10/100TX + 4 Dual Speed SFP L2+ Industrial Managed Ethernet Switch w/ Enhanced G.8032 Ring & Zero-touch Maintenance**

- ✓ *Optional Zero-touch Maintenance** to restore IP & configuration automatically to replaced switch*
- ✓ *Enhanced G.8032 ring protection < 20ms for single ring. Supports auto mode, enhanced mode, train mode, multi-VLAN and basic mode; Enhanced G.8032 ring covers multicast packets; MSTP 16MSTI /RSTP ; support MRP ring***
- ✓ *Miss-wiring avoidance & Repowered auto ring restore (node failure protection)*
- ✓ *User friendly UI, including auto topology drawing and DDM threshold with dB values***; Complete CLI*
- ✓ *Support LACP link aggregation, IGMP v3/router port, DHCP server & DHCP Option82; Port based DHCP distribution, Mac based DHCP server, QoS by VLAN, SSH/SSL, HTTPS, INGRESS/EGRESS ACL L2/L3,TACACS+*, QinQ**, SMS*
- ✓ *Protocol based VLAN** ; IPv4/IPv6 Subnet based VLAN***
- ✓ *Optional Environmental Monitoring for temp., voltage and current. (-M model)*
- ✓ *Optional InstaView** for centralized backup, editing the configuration file and upgrade firmware**



[Datasheet \(download/datasheet/D-IES-3416DSFP.pdf\)](#)



[Hardware Manual \(download/datasheet/M-IPES_IES-3XXX_5XXX_IP30.pdf\)](#)



Web UI User's Manual (download/datasheet/M-3-5-Series-WebUI-Users-Manual.pdf)

For latest firmware, please send request to support@lantechcom.tw (mailto:support@lantechcom.tw)



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OVERVIEW

Lantech IES-3416DSFP is a high performance L2+ (Gigabit uplink) switch with 16 10/100TX + 4 100/1000M SFP which provides L2 wire speed and advanced security function for network aggregation deployment. It delivers ITU G.8032 enhanced ring recovery less than 20ms in single ring while also supports train ring, enhanced mode, multiple VLAN model with easy configuration. The comprehensive QoS, QoS by VLAN, advanced security including INGRESS/EGRESS ACL L2/L3, TACACS+, SSH/SSL, Mac based DHCP server, DHCP Option 82, DHCP server, IGMPv1/v2/v3/router port, QinQ** are supported and also required in large network. It also supports Cisco Discovery Protocol (CDP) for Ciscoworks to detect the switch info and show on L2 map topology.

Optional zero-touch maintenance to auto-restore settings with new replaced switches

When an old switch is being replaced in ring / linear topology, the zero-touch maintenance** feature on IMR server can auto restore the configuration to the new one, hence it can be handled with non-IT personnel and hassle-free.

Miss-wiring avoidance, Repowered auto ring restore, Loop protection, Ring storm control

The IES-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 IES-3416DSFP is able to alert with the LED indicator and disable ring automatically. 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. Loop protection is also available to prevent the generation of broadcast storm when a dumb switch is inserted in a closed loop connection. The G.8032 Ring storm control can automatically cut off RPL line when broadcast threads hold is over 85%

DHCP option 82 & Port based, Mac based DHCP, Option66, IPv6 DHCP server**

DHCP option 82 and Port based DHCP function 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 built-in DHCP Option 82 server offers the convenience of policy setting on the switch. Mac based DHCP server function assigns an IP address according to its MAC address to include dumb switches in DHCP network. DHCP option 66 is also supported. Optional IPv6 address resolution for DHCP server can be supported.

User friendly GUI, Auto topology drawing

The user friendly UI, innovative auto topology drawing and topology demo makes IES-3416DSFP much easier to get hands-on. The complete CLI enables professional engineer to configure setting by command line.

Enhanced G.8032 ring, 16 MSTI MSTP; Optional MRP ring

Lantech IES-3416DSFP features enhanced G.8032 ring which can be self-healed in less than 20ms for single ring topology protection covering Multicast packets. It also supports various ring topologies that covers double ring, multi-chain (under enhanced ring), train ring, basic ring, multiple-VLAN ring and auto-ring by easy setup than others. The innovative auto-Ring configurator (auto mode) can calculate owner and neighbor in one step. It supports MSTP that allows each spanning tree for each VLAN for redundant links with 16 MSTI.

Optional MRP (Media Redundancy Protocol) can be supported for industrial automation networks.

Editable configuration file; InstaView** for mass deployment

The configuration file of Lantech IES-3416DSFP can be exported and edited with word processor for the other switches configuration with ease. 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.

With optional InstaView, the configuration files can be mass backup, mass-editable deployed and auto upgrading firmware in batch make maintenance easy.

QoS by VLAN for legacy device

QoS by VLAN can allow switch to tag QoS by VLAN regardless the devices acknowledge QoS or not in which greatly enhance the bandwidth management in a network.

QinQ**, QoS QinQ** and GVRP** supported

It supports the QinQ**, QoS QinQ**, GVRP** for large VLAN segmentation.

Event log & message; 2DI / 2DO

In case of event, the IES-3416DSFP is able to send an email & SMS text message to pre-defined addresses as well as SNMP Traps out immediately. It provides 2DI and 2DO. When 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.

Optional environmental monitoring for switch inside information (-M model)

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

Wide range dual DC powered input with galvanic isolation; Relay contact alarm, High ESD protection

The Lantech IES-3416DSFP is designed with dual power supply at 9~60VDC. Featured with relay contact alarm function, the IES-3416DSFP is able to connect with alarm system in case of power failure. The IES-3416DSFP also provides $\pm 2000V$ EFT and $\pm 6000V$ ESD protection, which can reduce unstable situation caused by power line and Ethernet.

Industrial hardened design for extended temperature operation

Lantech IES-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 $-40^{\circ}C$ to 75° .

*Future Release

**Optional

***Optional DDM SFP required

About Lantech

Lantech offers a complete family of industrial networking products in support of the global transition to all Ethernet services. Lantech products and solutions provide for the delivery of universal Ethernet services across various markets and applications. [Learn More \(about-company-profile.html\)](#)

Taiwan Quality



Lantech is dedicated to providing the best quality and service to our customers. We proudly provide 5 years warranty to our industrial products. [Learn More \(support-warranty-policy.html\)](#)

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