

## Lantech IES-5208DF (IP67/IP43)

8 10/100TX + 2 100/1000FX L2+ Industrial Managed Switch w/ enhanced G.8032 Ring & PTP

EN50155/61373/45545-2 certified; Optional 72V / 110V input voltage

Enhanced G.8032 ring protection < 20ms with easy configuration; Train ring for dynamic coupling ring; Aggregation ring

Support PTPv2 <1us, relay contact & environmental monitoring

Miss-wiring avoidance; Repowered auto ring restore (node failure protection); Optional bypass protection

IP67/ IP43 housing; User friendly UI, including auto topology drawing; Complete CLI

Support LACP link aggregation, IGMP v3/router port, DHCP server & DHCP Option82 for Port&VLAN based DHCP distribution, Mac based DHCP server, QoS by VLAN, SSH/SSL, TACAS+, ACL, IPv6, SMS

Lantech IES-5208DF (IP67/IP43) is a high performance L2+ (Gigabit uplink) switch with 8 10/100TX + 2 Dual Speed Fiber by M12 provides L2 wire speed and advanced security function for network aggregation deployment. It delivers ITU G.8032 enhanced ring recovery less than 20ms including train coupling ring, enhanced mode for easy configuration and aggregation ring, comprehensive QoS, QoS by VLAN, advanced security including ACL L2/L3, SSH/SSL, Mac based DHCP server, DHCP Option 82, DHCP server, IGMPv1/v2/v3/router port, QinQ (double tag VLAN) which are important features required in train and large network. It also supports Cisco Discovery Protocol (CDP) and LLDP for Ciscoworks to detect the switch info and show on L2 map topology.

Lantech IES-5208DF (IP67/IP43) features hardware-based PTP IEEE1588 v2 function which can allow 2 100/1000M Fiber uplinks to synchronize the network with precise accuracy (under 1μs).

The Lantech IES-5208DF (IP67/IP43) is designed with dual power supply at 9.5~56VDC. Optional 72V model can accept 50.4V~90VDC dual input range for high speed train environment. Optional 110V model builds in one power with input voltage ranging from 77V~150V. Featured with relay contact alarm function, the IES-5208DF (IP67/IP43) is able to connect with alarm system in case of power failure or port disconnection events. The IES-5208DF (IP67/IP43) also provides ±2000V EFT and ±6000V ESD protection, which can reduce unstable situation caused by power line and Ethernet.

The IES-5208DF (IP67/IP43) 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-5208DF (IP67/IP43) 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. The optional hardware bypass function provides redundant fiber connection when power or switch fails in a ring or bus structure.

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 built-in DHCP Option 82 server offers the

convenience of police 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.

Lantech InstaConfig software provides easy configuration for mass deployment. 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 built-in watchdog design can automatically reboot the switch when cpu is found dead.

The user friendly UI, innovative auto topology drawing and topology demo makes IES-5208DF (IP67/IP43) much easier to get hands-on. The switch also equips the RTC (real time clock) which can keep track of time always. The complete CLI enables professional engineer to configure setting by command line.

Lantech IES-5208DF (IP67/IP43) features enhanced G.8032 ring which can be self-healed in less than 20ms for ring/chain topologies which covers dynamic coupling ring & aggregation ring protection. The innovative auto-Ring configurator (auto mode) can calculate owner and neighbor in one step. The enhanced mode and train mode ring configuration have 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 IES-5208DF (IP67/IP43) 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.

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.

In case of event alarm, the IES-5208DF (IP67/IP43) will immediately send an email & SMS text message to pre-defined addresses as well as SNMP Traps out. It provides 1DI and 1DO 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 built-in environmental monitoring can detect switch overall temperature, voltage and current where can send the SNMP traps, email and SMS alert when abnormal.

Lantech IES-5208DF (IP67/IP43) 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 IES-5208DF (IP67/IP43) is designed to meet with critical network environment with IP67/IP43 aluminum enclosure and M12 connectors for water proof. It passed serious tests under extensive Industrial EMI and Safety standards. With EN45545-2 Fire & Smoke, E-mark, and EN50155 certification, the IES-5208DF (IP67/IP43) is best for railway and vehicle applications. For more usage flexibilities, IES-5208DF (IP67/IP43) supports wide operating temperature from -40°C to 75°C.

