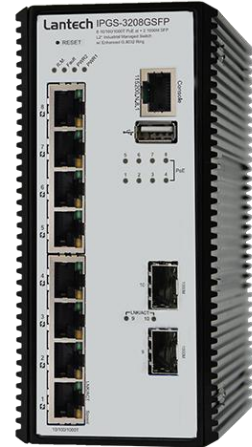


# IPGS-3208GSFP

8 10/100/1000T + 2 1000M SFP L2+ w/8 PoE at/af Industrial

Managed Switch w/ Enhanced G.8032 Ring; Optional 12V input model

- SFP cage support 1G Mbps SFP
- Support IEEE802.3at/af up to 30W per port
- PoE management incl. Detection and Scheduling
- 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 monitoring 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 ,current and PoE load
- Dual 12V/48V input voltage selection; Max PoE budget 120W @24V; 240W @48V
- Optional InstaView\*\* for centralized backup, editing the configuration file and upgrade firmware
- USB port to backup, restore the configuration file and upgrade firmware
- Wide range operation temperature (-E model):-40~75C/-40~167F



## OVERVIEW

Lantech IPGS-3208GSFP is a high performance L2+ all Gigabit switch with 8 10/100/1000T + 2x 1G multi-Giga- rate SFP w/8 PoE 802.3af/at Injectors 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 mode\*\* 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 10K Jumbo frame.

### 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.

### PoE at/af up to 8 Giga Ports with detection and scheduling

Lantech IPGS-3208GSFP supports advanced PoE management including PoE detection and scheduling. PoE

detection can detect if the connected PD hangs 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.

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

The IPGS-3208GSFP 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 IPGS-3208GSFP 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. 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 G.8032 Ring storm control can automatically cut off RPL line when RX threads hold is over 85%

### User friendly GUI, Auto topology drawing

The user friendly UI, innovative auto topology drawing and

topology demo makes IPGS-3208GSFP 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 IPGS-3208GSFP 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 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 RSTP over VLAN for redundant links with 16 MSTI\*\*.

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

**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.

**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.

**IGMPv3,GMRP\*, router port, static multicast forwarding and multicast Ring protection**

The unique multicast protection under enhanced G.8032 ring can offer immediate self-recovery instead of waiting for IGMP table timeout. It also supports IGMPv3, GMRP\*, router port and static multicast forwarding binding by ports for video surveillance application.

**Editable configuration file; USB port for configuration upload & download; InstaView\*\* for mass deployment**

The configuration file of Lantech IPGS-3208GSFP 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.

The built-in USB port can have configuration upload & download by USB dongle.

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

**Event log & message; 2 DI + 2DO**

In case of event, the IPGS-3208GSFP 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**

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

**Dual 12V~48V input with boost technology to 54V PoE output for 12V model, PoE budget 80W**

Lantech IPGS-3208GSFP-12V is designed with dual input power at 9.5V~56VDC while IPGS-3208GSFP-48V allows 44~56VDC input. The PoE budget for 12V input is 80W and 24V input is 120W.

**Industrial hardened design for extended temperature operation**

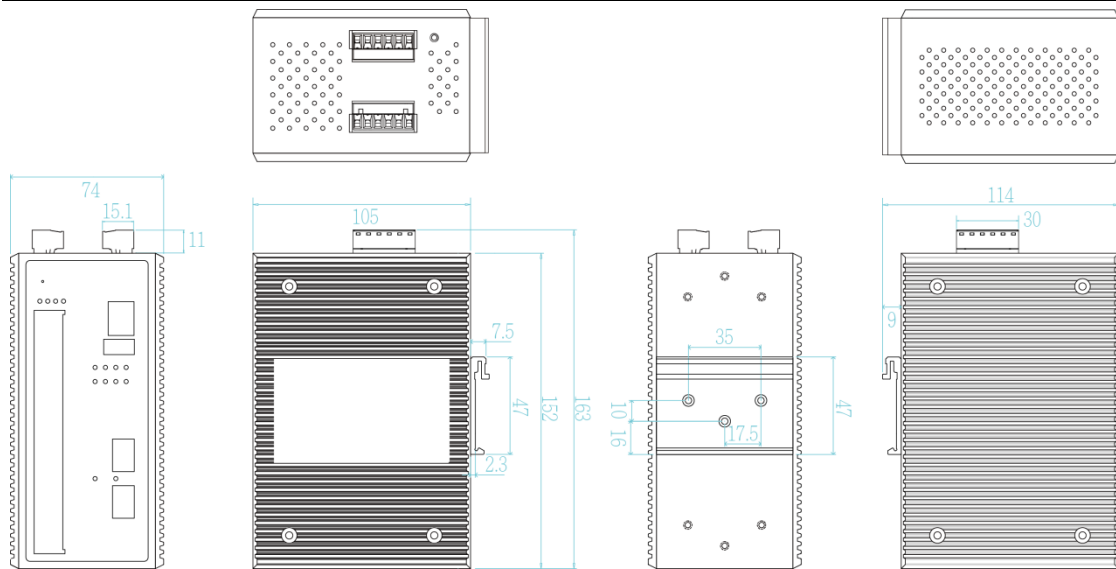
Lantech IPGS-3208GSFP provides  $\pm 2000V$  EFT/SURGE and  $\pm 6000V$  contact ESD protection, which can reduce unstable situation caused by power line and Ethernet. It has high reliability and robustness coping with extensive EMI/RFI phenomenon, environmental vibration and shocks usually found in 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.

## FEATURES & BENEFITS

- **8 10/100/1000T + 2 1G SFP w/8 PoE 802.3af/at Injectors (Total 10 Ports Switch)**
- **Support 10K bytes jumbo frames**
- **Embedded 8 PoE Injectors IEEE802.3af/at function to feed power up to 30W per port for active operation**
- **Dual 12V input(9.5V~56VDC) for PoE budget 80W/ 24V input for PoE budget 120W**
- **Dual 48V input(44V~56VDC to offer 240W PoE budget**
- **PoE management including PoE detection and scheduling for PD (power devices)**
- **Back-plane (Switching Fabric): 20Gbps**
- **16K MAC address table**
- **DDM to support SFP diagnostic function\*\*\***
  - *Automatically convert the raw data into dB values for TX power/RX power, making it easier to measure the fiber distance*
- **10KB Jumbo frame**
- **User friendly UI, auto topology drawing\*, topology demo, complete CLI for professional setting**
- **Enhanced G.8032 Ring protection in 20ms (single ring)**
  - *Support various ring/chain topologies, including train ring\*\*, enhanced ring, basic ring, auto ring & multiple VLAN ring\*\**
  - *Auto ring configuration\*\**
  - *Basic mode compatible with 3<sup>rd</sup> party ERPS\*\**
  - *Covers multi-cast and data packets\*\**
- **Ring storm control to cut off RPL line when RX threshold is over 85%\*\***
- **Zero-touch maintenance\*\* with IMR server for backup / restore configuration automatically when replace an old switch**
- **Provides EFT/SURGE protection ±2000 VDC for power line**
- **Supports ±6000 VDC ESD contact protection**
- **Built-in RTC (Real Time Clock) to keep track of time**
- **Supports IEEE 802.1p Class of Service, per port provides 8 priority queues Port base, Tag Base and Type of Service Priority**
- **IEEE 802.1d STP\*, IEEE 802.1w RSTP,802.1s MSTP VLAN redundancy with 16 MSTI**
- **4K 802.1Q VLAN, Port based VLAN, GVRP\*, QinQ\*, QoS QinQ\***
- **Supports IEEE 802.1ab LLDP, Cisco CDP; LLDP info can be viewed via Web/ Console/ Lantech™ InstaConfig\*/ Lantech™ InstaView\***
- **DHCP server / client / DHCP Option 82 relay / DHCP Option 82 server; Port based DHCP server; DHCP Option 66; IPv6 address resolution for DHCP server\*\***
- **Bandwidth Control**
  - *Ingress packet filter and egress rate limit*
  - *Broadcast/multicast packet filter control*
- **Relay alarm output system events**
- **Miss-wiring avoidance**
  - *LED indicator*
- **Repowered auto ring restore**
  - *Ensure the switches in a ring to survive after power breakout is back*
  - *The status can be shown in NMS when each switch is back*
- **System Event Log, SMTP Email alert, SMS mobile (text) and SNMP Trap for alarm support; 32 RMON counters**
- **Security**
  - *SSL\*/SSH/ L2&L3\**
  - *Port Security: MAC address entries/Filter/MAC-Port binding*
  - *IP Security: IP address security management to prevent unauthorized intruder.*
  - *Management access control with priority*
  - *TACACS+\**
  - *INGRESS/EGRESS ACL L2/L3\**
  - *Login Security: IEEE802.1X/RADIUS\**
  - *HTTPS for secure access to the web interface\**
- **Static multicast forwarding forward reversed IGMP flow with multicast packets binding with ports for IP surveillance application**
- **Multicast static route for non- IGMP camera to prevent flooding; IGMP router port to assign query in ring for reversed multicast video flow**
- **IGMPv1,v2,v3 with Query mode for multimedia; GMRP\***
- **Factory reset button to restore setting to factory default**
- **Optional environmental monitoring for system input voltage, current, ambient temperature**
- **Configuration backup and restoration**
  - *Supports editable configuration file for system quick installation*
  - *USB port for upload / download configuration by USB dongle*
  - *InstaView\*\* for centralized configuration deployment, backup & upgrade*
- **TFTP/SFTP\*\*/HTTP firmware upgrade; Lantech™ InstaView\*\* for multiple upgrade**
- **Watchdog design to auto reboot switch CPU is found dead**
- **IP30 metal housing with DIN rail and Wall-mount\*\* design**

**DIMENSIONS (unit=mm)**



**SPECIFICATION**

| Hardware Specification |  |
|------------------------|--|
| Standards              | IEEE802.3 10Base-T Ethernet<br>IEEE802.3u 100Base-TX<br>IEEE802.3ab 1000Base-T Ethernet<br>IEEE802.3z Gigabit fiber<br>IEEE802.3x Flow Control and Back Pressure<br>IEEE802.3ad Port trunk with LACP<br>IEEE802.1d Spanning Tree<br>IEEE802.1w Rapid Spanning Tree<br>IEEE802.1s Multiple Spanning Tree<br>IEEE802.3ad Link Aggregation Control Protocol (LACP)<br>IEEE802.1AB Link Layer Discovery Protocol (LLDP)<br>IEEE802.1X User Authentication (Radius)<br>IEEE802.1p Class of Service<br>IEEE802.1Q VLAN Tag<br>IEEE802.3at/af Power over Ethernet |
| Switch Architecture    | Back-plane (Switching Fabric): 20Gbps  |
| Transfer Rate          | 14,880pps for Ethernet port<br>148,800pps for Fast Ethernet port<br>1,488,000pps for Gigabit Fiber / Gigabit Ethernet port   |
| CPU                    | Marvell 1600Mhz  |
| RAM                    | 512M Byte  |
| Flash                  | 128M Byte  |
| Mac Address            | 16K MAC address table  |
| Jumbo frame            | 10KB   |
| Connectors             | 10/100/1000T: 8 x ports RJ-45 with Auto MDI/MDI-X function<br>SFP port: 2 x 1G SFT cage by software with DDMI supported<br>RS-232 connector: RJ-45 type; USB x 1<br>Power & Relay connector: 1 x 6-pole terminal block   |
| Network Cable          | 10Base-T: 2-pair UTP/STP Cat. 3, 4, 5/ 5E/ 6 cable<br>EIA/TIA-568 100-ohm (100m)<br>100Base-TX: 2-pair UTP/STP Cat. 5/ 5E/ 6 cable<br>EIA/TIA-568 100-ohm (100m)<br>1000Base-TX: 2-pair UTP/STP Cat. 5/ 5E/ 6 cable<br>EIA/TIA-568 100-ohm (100m)  |
| Optical Cable          | <b>1Gbps:</b><br>Multi mode: 0 to 550 m, 850 nm (50/125 μm); 0 to 2 km, 1310 nm (50/125 μm)<br>Single mode: 0 to 10 km/ 30 km/ 40 km, 1310 nm (9/125 μm); 0 to 50 km/ 60 km/ 80km/ 120 km, 1550 nm (9/125 μm)<br><b>WDM 1Gbps:</b>   |
| Protocol               | CSMA/CD  |
| LED                    | Per unit: Power 1 (Green), Power 2 (Green), FAULT (Red); RM(Green)<br>Ethernet port: Link/Activity (Green), Speed (Amber);<br>PoE : Link/Act (Green); Mini-GBIC: Link/Activity (Green)   |
| Operating Humidity     | 5% ~ 95% (Non-condensing)  |
| Operating Temperature  | -20°C~60°C / -4°F~140°F (Standard model)<br>-40°C~75°C / -40°F~167°F(E model)  |
| Storage Temperature    | -40°C~85°C / -40°F~185°F   |
| Power Supply           | 44~56VDC(48V model); 9.5V~56VDC(12V model)   |
| PoE Budget             | 240W for 44~56V input(48V model)<br>(54V input is recommended for PTZ or heater applications)<br>80W at 12V input; 120W at 24V input(12V model)  |
| PoE pin assignment     | RJ-45 port # 1~ # 8 support IEEE 802.3at/af<br>End-point. Per port provides up to 30W<br>Positive (VCC+): RJ-45 pin 1,2.<br>Negative (VCC-): RJ-45 pin 3,6.  |
| Power Consumption      | 10W  |
| Case Dimension         | IP-30, 74 (W) x 114 (D) x 152 (H) mm   |
| Weight                 | 900 g  |
| Installation           | DIN Rail and Wall Mount** Design   |
| EMI & EMS              | FCC Part 15 Class A<br>IEC/EN61000-6-2<br>CE EN55032 Class A<br>CE EN55024: CE EN61000-4-2 (ESD) Level 3<br>CE EN61000-4-3 (RS) Level 3<br>CE EN61000-4-4 (EFT) Level 3<br>CE EN61000-4-5 ED3 (Surge) Level 3<br>CE EN61000-4-6 (CS) Level 3<br>CE EN61000-4-8 (Magnetic field) Level 3  |
| Stability Testing      | IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)   |
| MTBF                   | 12V: 661,155 (Hrs)<br>48V: 683,567 (Hrs)   |
| Warranty               | 5 years  |
| Software Specification |  |
| Management             | SNMP v1 v2c, v3/ Web/Telnet/CLI  |
| SNMP MIB               | RFC 1215 Traps MIB*,   |

|                      |   |                                   |   |
|----------------------|---|-----------------------------------|---|
|                      | RFC 1213 MIBII<br>RFC 1158 MIBII<br>RFC 1157 SNMP MIB,<br>RFC 1493 Bridge MIB*<br>RFC 1573 IF MIB<br>RFC 2674 VLAN MIB*,<br>Partial RFC 1757 RMON,<br>RFC 2674 Q-Bridge MIB*; Bridge MIB,<br>LLDP MIB<br>RSTP MIB*<br>Private MIB   |                                   | static route; 1024 multicast groups; IGMP router port ;<br>IGMP query; GMRP*  |
|                      |   | Static MAC-Port bridge            | Static multicast forwarding forward reversed IGMP flow with multicast packets binding with ports for IP surveillance application  |
|                      |   | Bandwidth Control                 | Support ingress packet filter and egress packet limit. The egress rate control supports all of packet type. Ingress filter packet type combination rules are Broadcast/Multicast/Flooded Unicast packet, Broadcast/Multicast packet, Broadcast packet only and all types of packet. The packet filter rate can be set an accurate value through the pull-down menu for the ingress packet filter and the egress packet limit. |
| Enhanced G.8032 ring | Support ITU G.8032 v2/2012 for Ring protection in less than 20ms for self-heal recovery (single ring enhanced mode)<br>Support various ring/chain topologies<br>Includes train ring**, auto ring**, basic single ring, enhanced ring, multiple-VLAN ring**<br>Enhanced G.8032 ring configuration with ease<br>Cover multicast & data packets protection | RTC                               | Built-in Real Time Clock to keep track of time always   |
|                      |   | Flow Control                      | Supports Flow Control for Full-duplex and Back Pressure for Half-duplex   |
|                      |   | System Log                        | Supports System log record and remote system log server   |
| PoE Management       | 1. PoE Detection to check if PD is hang up then restart the PD<br>2. PoE Scheduling to On/OFF PD upon routine time table  | SMTP/Text SMS                     | Supports SMTP Server and 8 e-mail accounts for receiving event alert; can send SMS text alert via mobile  |
| Per Port PoE Status  | On/ Off, voltage, current, watts, temperature   | Relay Alarm                       | Provides one relay output for port breakdown, power fail and alarm.<br>Alarm Relay current carry ability: 1A @ DC24V  |
| User friendly UI     | <ul style="list-style-type: none"> <li>■ Auto topology drawing*</li> <li>■ Topology demo</li> <li>■ Auto configuration for G.8032(auto mode)** for single ring</li> <li>■ DDM threshold monitoring with dB values***</li> <li>■ Complete CLI for professional setting</li> </ul>  | Protection                        | <ul style="list-style-type: none"> <li>■ Miss-wiring avoidance</li> <li>■ Repowered auto ring restore</li> <li>■ Loop protection</li> <li>■ Ring Storm control cut off RPL line when threshold is over 85%**</li> </ul>   |
| Port Trunk with LACP | LACP Port Trunk: 8 Trunk groups   | SNMP Trap                         | Up to 10 trap stations; trap types including: <ul style="list-style-type: none"> <li>● Device cold start</li> <li>● Authorization failure</li> <li>● Port link up/link down</li> <li>● DI/DO open/close</li> <li>● Typology change(ITU ring)</li> <li>● Power failure</li> <li>● Environmental abnormal</li> </ul>  |
| LLDP                 | Supports LLDP to allow switch to advise its identification and capability on the LAN  | DHCP                              | Provide DHCP Client/ DHCP Server/DHCP Option 82/Port based DHCP; DHCP Option 66; IPv6 address resolution for DHCP server**  |
| CDP                  | Cisco Discovery Protocol for topology mapping   | DNS                               | Provide DNS Client feature and support Primary and Secondary DNS server.  |
| VLAN                 | Port Based VLAN<br>IEEE 802.1Q Tag VLAN (256 entries)/ VLAN ID (Up to 4K, VLAN ID can be assigned from 1 to 4096.)<br>GVRP*, QinQ*, QoS QinQ*, Protocol based VLAN** ; IPv4/IPv6 Subnet based VLAN**  | SNTP                              | Supports SNTP to synchronize system clock in Internet   |
| IPv6/4               | Present   | Environmental Monitoring**        | System status for input voltage, current, consumption and ambient temperature to be shown in GUI and sent alerting if any abnormal status(-M models)  |
| RSTP/MSTP            | Supports IEEE802.1d Spanning Tree and IEEE802.1w Rapid Spanning Tree, IEEE802.1s Multiple Spanning Tree with 8 MSTI   | Firmware Update                   | Supports TFTP/SFTP** firmware update, TFTP backup and restore; HTTP firmware upgrade; Lantech™ InstaView** for multiple upgrade   |
| Quality of Service   | The quality of service determined by port, Tag and IPv4 Type of service, IPv4 Differentiated Services Code Points - DSCP  | Configuration upload and download | Supports editable configuration file for system quick installation; Support factory reset button to restore all settings back to factory default; USB port for upload/download configuration by USB dongle<br>Optional InstaView for mass backup, editing configuration and upgrade   |
| Class of Service     | Support IEEE802.1p class of service, per port provides 8 priority queues  |                                   |   |
| IP Security          | Supports 10 IP addresses that have permission to access the switch management and to prevent unauthorized intruder.   |                                   |   |
| Login Security       | Supports IEEE802.1X Authentication/RADIUS*  |                                   |   |
| Port Mirror          | Support 3 mirroring types: "RX, TX and Both packet"   |                                   |   |
| Network Security     | Support 10 IP addresses that have permission to access the switch management and to prevent unauthorized intruder.<br>802.1X access control*/MAC-Port binding<br>TACACS+*<br>INGRESS/EGRESS ACL L2/L3*<br>SSL*/ SSH for Management<br>HTTPS* for secure access to the web interface   |                                   |   |
| IGMP                 | Support IGMP snooping v1,v2,v3; Supports IGMP   |                                   |   |

\*Future Release  
\*\*Optional  
\*\*\*Optional DDM SFP required



## ORDERING INFORMATION

- **IPGS-3208GSFP-48V**.....P/N: **8350-9903**  
8 10/100/1000T + 2 1Gbps SFP w/8 PoE Mode A 802.3at/af 30W Managed Industrial Switch; dual 44~56VDC input; -20°C to 60°C
- **IPGS-3208GSFP-48V-E**.....P/N: **8350-9904**  
8 10/100/1000T + 2 1Gbps SFP w/8 .PoE Mode A 802.3at/af 30W Managed Industrial Switch; dual 44~56VDC input; -40°C to 75°C
- **IPGS-3208GSFP-12V**.....P/N: **8350-9923**  
8 10/100/1000T + 2 1Gbps SFP w/8 PoE Mode A 802.3at/af 30W Managed Industrial Switch, dual 9.5V~56VDC input; -20°C to 60°C
- **IPGS-3208GSFP-12V-E**.....P/N: **8350-9924**  
8 10/100/1000T + 2 1Gbps SFP w/8 PoE Mode A 802.3at/af 30W Managed Industrial Switch, dual 9.5V~56VDC input; -40°C to 75°C
- **IPGS-3208GSFP-M-48V**.....P/N: **8350-9913**  
8 10/100/1000T + 2 1Gbps SFP w/8 PoE Mode A 802.3at/af 30W Managed Industrial Switch w/Environmental monitoring; dual 44~56VDC input; -20°C to 60°C
- **IPGS-3208GSFP-M-48V-E**.....P/N: **8350-9914**  
8 10/100/1000T + 2 1Gbps SFP w/8 .PoE Mode A 802.3at/af 30W Managed Industrial Switch w/Environmental monitoring; dual 44~56VDC input; -40°C to 75°C
- **IPGS-3208GSFP-M-12V**.....P/N: **8350-9925**  
8 10/100/1000T + 2 1Gbps SFP w/8 PoE Mode A 802.3at/af 30W Managed Industrial Switch w/Environmental monitoring, dual 9.5V~56VDC input; -20°C to 60°C
- **IPGS-3208GSFP-M-12V-E**.....P/N: **8350-9926**  
8 10/100/1000T + 2 1Gbps SFP w/8 PoE Mode A 802.3at/af 30W Managed Industrial Switch w/Environmental monitoring, dual 9.5V~56VDC input; -40°C to 75°C

## OPTIONAL ACCESSORIES

### DIN Rail Power

- **NDR-480 Series** 480W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C)
- **NDR-240 Series** 240W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C)
- **NDR-120 Series** 120W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C; For 115VAC, please refer to derating curve on NDR-120 Series datasheet)
- **NDR-75 Series** 75W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C; For 115VAC, please refer to derating curve on NDR-120 Series datasheet)

### Mini GBIC (SFP)

- |  |  |
|--|--|
| ■ <b>8330-162X</b> MINI GBIC 1000SX (LC/0.5km) Transceiver | ■ <b>8330-189</b> LTSFP-1000BX-10KM Transceiver (WDM 1550) |
| ■ <b>8330-163X</b> MINI GBIC 1000SX2 (LC/2km) Transceiver  | ■ <b>8330-186</b> LTSFP-1000BX-20KM Transceiver (WDM 1310) |
| ■ <b>8330-165X</b> MINI GBIC 1000LX (LC/10km) Transceiver  | ■ <b>8330-187</b> LTSFP-1000BX-20KM Transceiver (WDM 1550) |
| ■ <b>8340-0591</b> MINI GBIC 1000LHX (LC/40km) Transceiver | ■ <b>8330-180</b> LTSFP-1000BX-40KM Transceiver (WDM 1310) |
| ■ <b>8330-166</b> MINI GBIC 1000XD (LC/50km) Transceiver   | ■ <b>8330-182</b> LTSFP-1000BX-40KM Transceiver (WDM 1550) |
| ■ <b>8330-169</b> MINI GBIC 1000XD (LC/60km) Transceiver   | ■ <b>8330-181</b> LTSFP-1000BX-60KM Transceiver (WDM 1310) |
| ■ <b>8330-167</b> MINI GBIC 1000ZX (LC/80km) Transceiver   | ■ <b>8330-183</b> LTSFP-1000BX-60KM Transceiver (WDM 1550) |
| ■ <b>8330-170</b> MINI GBIC 1000EZ (120km) Transceiver     | ■ <b>8330-184</b> LTSFP-1000BX-80KM Transceiver (WDM 1490) |
| ■ <b>8330-168</b> MINI GBIC 1000T (100m) Transceiver       | ■ <b>8330-185</b> LTSFP-1000BX-80KM Transceiver (WDM 1550) |
| ■ <b>8330-188</b> LTSFP-1000BX-10KM Transceiver (WDM 1310) |  |

All SFP ended with D are with Diagnostic function

Lantech Communications Global Inc.

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