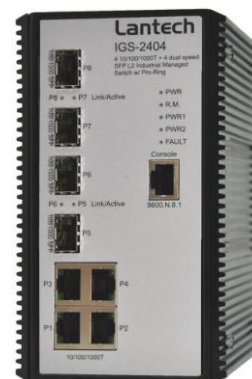


IGS-2404

4 10/100/1000T + 4 100/1000 Dual Speed SFP

Pro-Ring Managed Industrial Switch

- Wide-range redundant power design
- Pro-Ring system covers X-ring, Dual Homing, and Couple Ring Topology
- Relay Alarm Output System Events
- IP-30 metal housing with DIN rail and wall mount design



OVERVIEW

The Lantech IGS-2404 is a 4-port 10/100/1000T + 4-port 100/1000 Dual Speed SFP L2 managed industrial switch. The SFP interface supports both 100M and Giga fiber. The Lantech IGS-2404 redundant power design and Pro-Ring features ensure a high-performance and reliable network connection.

The Lantech IGS-2404 is designed with redundant power supply and wide power input range: $\pm 9\sim 56$ VDC. Featured with relay contact function, the IGS-2404 is able to connect with alarm system in case of power or port failure. The IGS-2404 also provides 3000V EFT and 4000V ESD protections, which can reduce unstable condition caused by power line and Ethernet.

The Lantech IGS-2404 supports Pro-Ring system, which covers

X-Ring, Couple Ring, and Dual Homing. X-Ring provides a recovery time of less than 10ms*** for a ring of up to 250 switches. Couple Ring ensures network recovery protection between two X-Ring groups as well as Dual homing to back up the X-Ring groups when connect to upper layer or core switch.

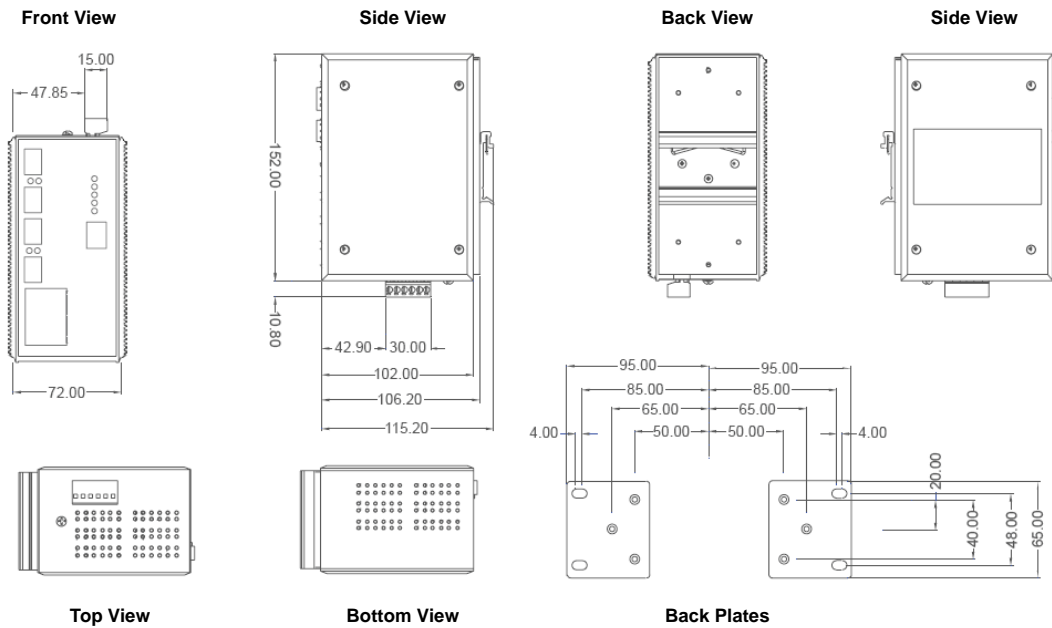
Lantech-View 10node version is free bundle with the IGS-2404, in which it monitors and configures multiple Lantech industrial switches. Optional Lantech-View Pro can map up to unlimited user with auto-layout, configuration and discovery.

The Lantech IGS-2404 can set Back-up Masters in X-Ring to ensure the most secure network. It is the best solution for Automation, transportation, surveillance, Wireless backhaul, Semi-conductor factory and assembly lines.

FEATURES & BENEFITS

- 4 10/100/1000T + 4 100/1000 Dual Speed SFP L2 Managed Industrial Switch. (Total 8 Port Switch)
- RJ-45 Port Support Auto MDI/MDI-X Function.
- Conforms to IEEE 802.3 10Base-T, 802.3u 100Base-TX, and IEEE 802.3ab 1000Base-T.
- IEEE 802.3x flow Control Support.
- Store-and-Forward Switching Architecture.
- Back-plane (Switching Fabric):16Gbps
- SFP (Mini-GBIC) Support 100/1000 Dual Mode.
- 1Mbits Packet Buffer & 8K MAC address table
- Wide-range redundant power design with power polarity reverse protection.
- Pro-Ring
 - X-ring, Dual Homing, and Couple Ring Topology.
 - Provide redundant backup feature and the recovery time below 10ms***.
- Provides EFT protection 3000 VDC for power line.
- Supports 4000 VDC Ethernet ESD protection
- Provides Ground Isolation Protection
- Supports IEEE 802.1p Class of Service, per port provides 4 priority queues Port base, Tag Base and Type of Service Priority
- IEEE 802.1d Spanning Tree & IEEE 802.1w RSTP
- Port Based VLAN, 802.1Q Tag VLAN, Double Tag VLAN (Q in Q)**
- Supports Ingress Packet Filter and Egress Rate Limit.
- System Log Server/Client.
- SMTP e-mail Alert
- Relay Alarm Output System Events
- Security
 - Port Security: MAC address entries/Filter
 - IP Security: IP address security management to prevent unauthorized intruder.
 - Login Security: IEEE802.1X/RADIUS
- IGMP with Query mode for Multi Media
- TFTP Firmware Update and System Configure Restore/Backup.
- IP30 metal housing with DIN rail and wall mount design

DIMENSIONS (unit=mm)



SPECIFICATION

Hardware Specification		terminal block									
Standards	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX IEEE802.3ab 1000Base-T IEEE802.3z Gigabit fiber IEEE802.3x Flow Control and Back Pressure IEEE802.3ad Port trunk with LACP IEEE802.1d Spanning Tree IEEE802.1w Rapid Spanning Tree IEEE802.1p Class of Service IEEE802.1Q VLAN Tag IEEE802.1x User Authentication (Radius) IEEE802.1ab LLDP	Power Consumption	<table border="1"> <tr> <td>DC input</td> <td>12V</td> </tr> <tr> <td rowspan="2">Un- load</td> <td>A 0.954</td> </tr> <tr> <td>W 11.448</td> </tr> <tr> <td rowspan="2">Full Load</td> <td>A 1.442</td> </tr> <tr> <td>W 17.304</td> </tr> </table>	DC input	12V	Un- load	A 0.954	W 11.448	Full Load	A 1.442	W 17.304
DC input	12V										
Un- load	A 0.954										
	W 11.448										
Full Load	A 1.442										
	W 17.304										
Switch Architecture	Back-plane (Switching Fabric): 16Gbps Packet throughput ability (Full-Duplex): 23.8Mpps @64bytes	Optical Cable	Multi-mode: 50/125um-62.5/125um Single mode: 9/125um Available distance: 2km (Multi-mode)/30km (Single-mode) Wavelength: 1310nm (Multi-mode/Single mode)								
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port 1,488,000pps for Gigabit Fiber Ethernet port	Case Dimension	Metal case, IP-30, 72 (W) x 105 (D) x 152 (H) mm								
Packet Buffer	1Mbits	Weight	1250 g								
Mac Address	8K MAC address table	Installation	DIN Rail and Wall Mount Design								
Flash ROM	4Mbytes	EMI & EMS	FCC Class A, CE EN61000-4-2 (ESD), CE EN61000-4-3 (RS), CE EN-61000-4-4 (EFT), CE EN61000-4-5 (Surge), CE EN61000-4-6 (CS), CE EN61000-4-8, CE EN61000-4-11, CE EN61000-4-12, CE EN61000-6-2, CE EN61000-6-4								
DRAM	32Mbytes	Safety	UL, cUL, CE/EN60950-1 UL Class I Division II for Group A,B,C and D hazardous location								
Connectors	10/100/1000T: 4 x RJ-45 Mini-GBIC: 4 x 100/1000 SFP Sockets Console port: RS-232 connector	Stability Testing	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)								
Network Cable	10Base-T: 2-pair UTP/STP Cat. 3, 4, 5, 6 cable EIA/TIA-568 100-ohm (100m) 100Base-TX: 2-pair UTP/STP Cat. 5/5E/6 cable EIA/TIA-568 100-ohm (100m)	MTBF	286,945 hrs								
Protocol	CSMA/CD	Warranty	5 years								
LED	Per unit: Power (Green), Power 1 (Green), Power 2 (Green), Fault (Red), Master (Green) Per port: Link/Activity (Green), Speed (1000Mbps Green) SFP: Link/Activity (Green)	Software Specification									
Operating Humidity	5% ~ 95% (Non-condensing)	Management	SNMP v1 v2c, v3/ Web/Telnet/CLI								
Operating Temperature	-20°C~60°C / -4°F~140°F (Standard model)	SNMP MIB	RFC 1215 Traps MIB, RFC 1213 MIBII, RFC 1157 SNMP MIB, RFC 1493 Bridge MIB, RFC 2674 VLAN MIB, RFC 1643 EtherLike, RFC 1757 RMON, RSTP MIB, Private MIB, LLDP MIB								
Storage Temperature	-40°C~85°C / -40°F~185°F										
Power Supply	±9~56VDC, 18~36VAC**, Redundant power with polarity reverse protect function and removable										

Pro-ring	Supports X-ring, Dual Homing, and Couple Ring Provides redundant backup feature and the recovery time below 10ms*** for a ring of up to 250 switches		and all of packet. The packet filter rate can be set from 100k to 250Mbps
Port Trunk with LACP	LACP Port Trunk: 4 Trunk groups/Maximum 4 trunk members	Flow Control	Supports Flow Control for Full-duplex and Back Pressure for Half-duplex
LLDP	Supports LLDP to allow switch to advise its identification and capability on the LAN	System Log	Supports System log record and remote system log server
VLAN	Port Based VLAN IEEE 802.1Q Tag VLAN (256 entries)/ VLAN ID (Up to 4K, VLAN ID can be assigned from 1 to 4096.) GVRP (256 Groups) Double Tag VLAN (Q in Q)* Private VLAN**	SMTP	Supports SMTP Server and 6 e-mail accounts for receiving event alert
Spanning Tree	Supports IEEE802.1d Spanning Tree and IEEE802.1w Rapid Spanning Tree	Relay Alarm	Provides one relay output for port breakdown, power fail and alarm. Alarm Relay current carry ability: 1A @ DC24V
Quality of Service	The quality of service determined by port, Tag and IPv4 Type of service, IPv4/IPv6 Different Service	SNMP Trap	Up to 3 Trap stations Cold start, Port link up, Port link down, Authentication Failure, Private Trap for power status, Port Alarm configuration, Fault alarm, X-Ring topology change
Class of Service	Supports IEEE802.1p class of service, per port provides 4 priority queues	DHCP	Provide DHCP Client/ DHCP Server
Port Security	Supports 100 entries of MAC address for static MAC and another 100 for MAC filter	DNS	Provide DNS client feature and support Primary and Secondary DNS server.
Port Mirror	Supports 3 mirroring types: *RX, TX and Both packet*.	SNTP	Supports SNTP to synchronize system clock in Internet
IGMP	Supports IGMP snooping v1,v2, v3 256 multicast groups and IGMP query	Firmware Update	Supports TFTP firmware update, TFTP backup and restore.
IP Security	Supports 10 IP addresses that have permission to access the switch management and to prevent unauthorized intruder.	Configuration upload and download	Supports binary format configuration file for system quick installation
Login Security	Supports IEEE802.1X Authentication/RADIUS		
Bandwidth Control	Supports ingress packet filter and egress packet limit The egress rate control supports all of packet type and the limit rates are 100K~250Mbps Ingress filter packet type combination rules are Broadcast/Multicast/Unknown Unicast packet, Broadcast/Multicast packet, Broadcast packet only		

*Future release
**Optional
***The Recovery Time of X-Ring: SFP<10ms ; G-T<150ms

ORDERING INFORMATION

- **IGS-2404.....P/N: 8350-800**
4 10/100/1000T + 4 100/1000 Dual Speed SFP L2 Managed Industrial Switch; -20°C to 60°C
- **IGS-2404-AC.....P/N: 8350-800-AC**
4 10/100/1000T + 4 100/1000 Dual Speed SFP L2 Managed Industrial Switch; -20°C to 60°C; 18~36VAC

OPTIONAL ACCESSORIES

DIN Rail Power

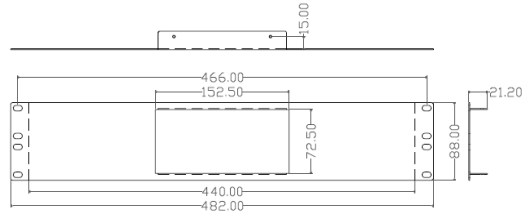
- **AD1048-24FS** 24VDC, 2A, Wide AC Input, Convection Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C (ambient, derating each output at 2.5% per degree from 50°C ~ 75°C, which means the output is 18 Watts at 75°C.)
- **AD1024-24F** 24VDC, 1A, Wide AC Input, Convection Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C (ambient, derating each output at 2.5% per degree from 50°C ~ 75°C, which means the output is 9 Watts at 75°C.)
- **AD1240-48S** 48VDC, 5A, Wide AC Input, Build-in fan Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C)
- **AD1120-48F** 48VDC, 2.5A, Wide AC Input, Build-in fan Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C)

Mini GBIC (SFP)

- | | |
|--|--|
| ■ 8330-162 MINI GBIC 1000SX (LC/0.5km) Transceiver | ■ 8330-061 100Base LX 30KM, Single-mode, LC Transceiver |
| ■ 8330-163 MINI GBIC 1000SX2 (LC/2km) Transceiver | ■ 8330-188 LTSFP-1000BX-10KM Transceiver (WDM 1310) |
| ■ 8330-165 MINI GBIC 1000LX (LC/10km) Transceiver | ■ 8330-189 LTSFP-1000BX-10KM Transceiver (WDM 1550) |
| ■ 8340-0591 MINI GBIC 1000LHX (LC/40km) Transceiver | ■ 8330-186 LTSFP-1000BX-20KM Transceiver (WDM 1310) |
| ■ 8330-166 MINI GBIC 1000XD (LC/50km) Transceiver | ■ 8330-187 LTSFP-1000BX-20KM Transceiver (WDM 1550) |
| ■ 8330-169 MINI GBIC 1000XD (LC/60km) Transceiver | ■ 8330-180 LTSFP-1000BX-40KM Transceiver (WDM 1310) |
| ■ 8330-167 MINI GBIC 1000ZX (LC/80km) Transceiver | ■ 8330-182 LTSFP-1000BX-40KM Transceiver (WDM 1550) |
| ■ 8330-170 MINI GBIC 1000EZX (120km) Transceiver | ■ 8330-181 LTSFP-1000BX-60KM Transceiver (WDM 1310) |
| ■ 8330-168 MINI GBIC 10/100/1000T (100m) Transceiver | ■ 8330-183 LTSFP-1000BX-60KM Transceiver (WDM 1550) |
| ■ 8330-060 100Base FX 2KM, Multi-mode, LC Transceiver | ■ 8330-184 LTSFP-1000BX-80KM Transceiver (WDM 1490) |
| ■ 8330-065 100Base FX 5KM, Multi-mode, LC Transceiver | ■ 8330-185 LTSFP-1000BX-80KM Transceiver (WDM 1550) |

Rack Mounting Kit

- **MBAK19001** 19" Rack Mounting Kit for 72x105x152mm Industrial Switch



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