

# LGS-2300-RPS

**3-Gigabit-Modular-Slots Chassis L2 + Managed Switch**  
with 12-48V DC Redundant Power Supply socket

- Maximum 24xGigabit T / SFP connectivity
- Advanced SNMP functionality for L2plus
- Supports IGMP v1, v2, v3\*\*



## OVERVIEW

Lantech LGS-2300-RPS is a full SNMP L2+ / Web managed switch that suits FTTH Ethernet network, Campus network, Surveillance control room network in aggregation point. The RPS (redundant power supply) can secure the switch from downtime or to be used in Telco environment that requests -48V power input.

The unique features of LGS-2300-RPS are ACL 256 List\*, IP address security, Mac address filtering, Static Mac filtering for big network security. The bandwidth control and rate shaping are ideal for ISP or Campus administration to allocate appropriate bandwidth within big network. The DHCP server, client function can manually configure a specific IP address, or direct the device to obtain an IP address from the network. It

also supports Quality of Service (QoS), which adjusts the network traffic priority, for example, video and voice packets as high priority, in which it supports 8 priority queues with Cos (Class of Service) standard. The Internet Group Management Protocol (IGMP Query & Snooping) manages the multicast packet application in the network without congest the network, for on-line study or video conference applications. The SNTP and SMTP functions can immediately alert up to 10 email accounts for any events of the switch.

Three (3) Modular Slots designed in 1 u compact size provides the maximum resilience link in mix of Fiber and Copper cables where meets every network demand.

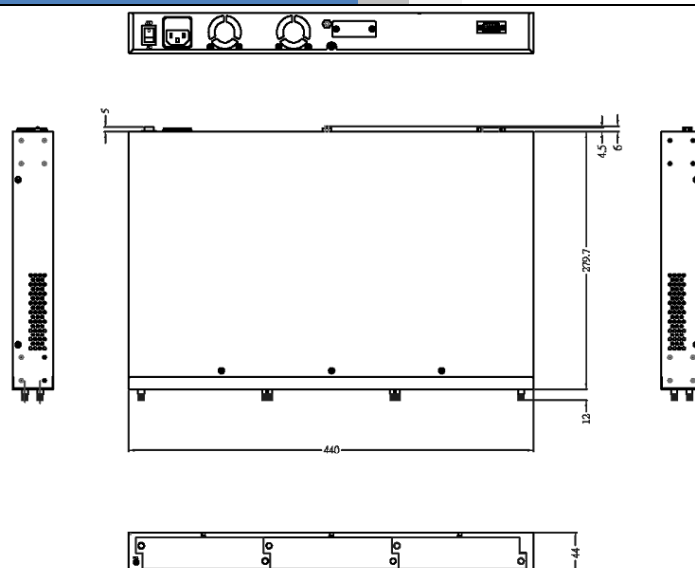
## FEATURES & BENEFITS

- 3-slots Gigabit Module Hot-swappable managed switch
- 48G Switching capacity; Redundant Power Supply (DC12 to 48V)
- Supports 8 - 10/100/1000T module, 8-port Mini GBIC module, 4-port GigaT Copper & 4-port MINI GBIC module
- SNMP/RMON1/Telnet/CLI/Web management
- Supports Jumbo frame up to 10K
- SNMP v1,v2c; SNMP Trap
- Port Based VLAN /802 .1Q VLAN; 256VLAN groups
- Double Tag VLAN support\*\*
- IEEE 802.1ab Link Layer Discovery Protocol(LLDP)
- QoS with 8 priority queues:
  - Port based / Tag based
  - IPv4 TOS; IPv4 DiffServe
- IEEE802.1d STP /802.1w Rapid STP/802.1s Multiple STP\*\*
- IEEE802.3ad port trunk with LACP
- IGMP v1, v2, v3\*\*
- Bandwidth control; Rate shaping
- Up to 10 IP Access Security; Mac address filtering; Static Mac filtering Multicast filtering
- IEEE 802.1x user authentication
- Simple Network Time Protocol (SNTP)
- SMTP supports for 2 email servers; each server supports up to 5 email addresses
- DHCP client and DHCP Server; DNS client
- Port security, Port mirror
- 256 ACL List\*

**SPECIFICATION**

Hardware Specification		Firmware Upgrade	TFTP,
Standard	IEEE802.3 10BASE-T IEEE802.3u 100BASE-TX IEEE802.3z Gigabit fiber IEEE802.3ab 1000Base-T IEEE802.3x Flow control and Back pressure IEEE802.3ad Port trunk with LACP IEEE802.1d Spanning tree protocol IEEE802.1s Multiple spanning tree** IEEE802.1w Rapid spanning tree IEEE802.1p Class of service IEEE802.1q VLAN Tagging IEEE802.1x user authentication IEEE802.1ab LLDP	Configuration upload and download	System quick installation and backup by TFTP.
Connector	RS-232 console: Female DB-9 Gigabit copper module: 8 x RJ-45 MINI GBIC module: 8 x MINI GBIC socket 4 Gigabit Copper & 4 MINI GBIC module: 4 x RJ-45 + 4 x 3.3v MINI GBIC Socket.	Port Trunk	Support IEEE802.3ad with LACP function. Up to 7 trunk groups with failover feature and the member up to 8 ports.
Switch architecture	Store and forward switch architecture with Back-plane up to 48Gbps. Packet throughput ability (Full-Duplex): 71.43Mpps @64bytes	Spanning Tree	IEEE802.1d Spanning tree IEEE802.1w Rapid spanning tree IEEE802.1s Multiple spanning tree**, 256Groups. Spanning tree guard/Root Guard**
MAC address	16K MAC address tables with auto learning function.	VLAN	Port based VLAN, up to 24 groups IEEE802.1Q Tag VLAN The static VLAN groups up to 4K entries and dynamic VLAN groups up to 256, the VLAN ID can be assigned from 1 to 4094. GVRP up to 2K groups. Double Tag VLAN support.** Private VLAN Security.**
Packet buffer	6Mbits for packet buffer.	MVR **	Support Multicast VLAN Registration
Jumbo frame	10 KB	Class of Service	Per port 8 priority queues and support strict and WRR priority rule. Weight round ratio (WRR): 14: 12: 10: 8: 6: 4: 2: 1
Flash ROM	8Mbytes	Quality of Service	Port based, Tag based, IPv4 Type of service, IPv4 Different service.
System memory	32Mbytes	IGMP	IGMP v1, v2, v3** The IGMP supports 256 multicast groups and IGMP query.
LED	System Power(Green ) 10/100/1000TX module: 1000Mbps, Link/Activity(Green ), Full duplex/ collision(Yellow) 8 Port MINI GBIC: Link/Activity (Green ) 4 Port Gigabit copper + 4 Port MINI GBIC module: RJ-45 (1000Mbps, Link/Activity (Green ) Full duplex/ collision(Yellow)), MINI GBIC (Link/Activity)(Green)	Port Security	Support 128 entries of MAC address for static MAC and another 128 for MAC filter
Power supply	AC 100~240V 50/60Hz ,Redundant Power: DC (12V~48V)	Port Mirror	Support 3 mirroring types: RX, TX and Both packet.
Power consumption	Watts (Maximum)	Bandwidth Control	Per port support ingress rate limiting and egress rate shaping control. The rate limiting and rate shaping can be setting 64kbps by each level,(64kbps, 128kbps,256kbps...etc).
Ventilation	2 FAN with fail detection	Access security	1. IP Management Security: Support IP addresses security to prevent unauthorized intruder. 2. TACACS+**
Operating environment	0℃~45℃, 5%~95%RH	802.1x Authentication	Support IEEE802.1x User-Authentication and can report to RADIUS server. - Reject - Accept - Authorize - Disable
Storage environment	-40℃~70℃, 5%~95% RH	Access Control List	The system provides 256 Policy Control Lists and the key size support 48bytes or 24 bytes. Based on 24 bytes key size, the policy rule can support to 256 lists and the rule can by packet type, VLAN ID, MAC address, IP address, TOS field, COS value and service number.
Environment monitor	FAN fail detect (for two fans), Power detection	DHCP	DHCP client and DHCP Server.
Dimension	440mm(W) x 224mm(D) x 44mm(H)	DNS	Provide DNS client feature and support Primary and Secondary DNS server.
EMI	Compliance with FCC Class A, CE	System log	Provide remote storage ability and also can view the log by Web/Telnet/SNMP interface. Maximum entry support 1000 records.
Safety	Compliance with UL, cUL, CE/EN60950-1	SNTP	Support RFC2030 SNTP client.
Warranty	2 years	SMTP	System supports 5 mail accounts and 2 Mail servers for Primary and Secondary. The SMTP will auto send event message to supervisor whom is pre-defined in the SMTP system through the pre-defined mail server.
<b>Software Specification</b>		Packet filter	Broadcast storm control
Management	Telnet management, web management, RS-232 console management	LLDP	Support IEEE 802.1ab Link Layer Discovery Protocol
MIB	RFC 2863 Interface Group MIB, RFC3418 SNMP MIB, RFC 1213 MIBII, RFC 2011 MIB, RFC 1493 Bridge MIB, RFC 2674 VLAN MIB, RFC 2665 Ethernet Like MIB, RFC 1215 Trap MIB, RFC2819 RMON MIB, RFC 2096 IP Forwarding Table MIB**, RFC2933 IGMP MIB**, RFC2618 Radius Client MIB**, TACACS+ Authentication Client MIB**, Private MIB**	*Future Release **Optional	
RFC standard	RFC2030 SNTP, RFC2821 SMTP, RFC1757 RMON1, RFC1157 SNMP, RFC1215 Trap, RFC0826 ARP, RFC0792 ICMP, RFC1112, RFC2131, RFC2236, RFC3376, RFC1122, RFC1349, RFC2474, RFC2742.		
SNMP Trap	Link down/Link up trap, Cold start/Warm start trap, Authentication fail trap, Fan fail trap, Power event trap.		
Flow Control	Support IEEE802.3x Flow control: Flow control for 10/100/1000 full duplex Back pressure for 10/100 half duplex		

**DIMENSIONS (unit=mm)**



**ORDERING INFORMATION**

- **LGS-2300-RPS.....P/N: 8370-550**  
Gigabit Slot Modular Chassis SNMP L2 + Switch with Redundant Power Supply Socket; 0°C to 45°C
- **8xGigaT Module.....P/N: 8370-560**  
8x 10/100/1000T Module
- **8xGigaSFP Cage Module.....P/N: 8370-590**  
8x GigaSFP Module
- **4GT4SFP Cage Module.....P/N: 8370-595**  
4 x 10/100/1000T + 4x Gigabit SFP Cage Module

**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)**

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

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