



Overview

The RS-IS-200 Series is a full Gigabit L2+ managed Industrial PoE switch family independently developed by Rubisec.

It has 8 or 16 or 24 *10/100/1000Base-T adaptive RJ45 ports and 2 or 4 or 8 *100/1000Base-X SFP slot ports; Each port can support wire-speed forwarding. PoE Ports can support IEEE 802.3 af/at PoE standard, and single-port PoE power up to 30W. As a PoE power supply device, it can automatically detect and identify powered devices that meet standards and power them through network cables. It can power PoE terminal equipment such as wireless AP, IP camera, Internet telephone, and building visual access control intercoms through network cables to meet network environments that require high-density PoE power supply.

The RS-ES-200 Series Industrial Layer 2+ Gigabit Managed Switch is designed specifically to to low power consumption, galvanized steel casing, and excellent heat dissipation ensure the stable operation. These rugged yet easy to deploy switches have superior environmental specifications compared to those of commercial network switches. With its hardened design combined with high availability network features, these switches form vital parts of any network infrastructure facilitating the increasing demand for smart cities, city-wide surveillance and wireless connectivity.

It is suitable for hotels, campuses, parks, supermarkets, scenic spots, factories, dormitories, and SMB small and medium-sized enterprises to establish cost-effective networks.

Models	RS-IS-200-10GP	RS-IS-200-20GP	RS-IS-200-24GP	RS-IS-200-28GP
Interface Characteristics				
Console Port	1*Console RS232 port			
Fixed Port	2*100/1000 Base-X uplink SFP ports 8*10/100/1000Base-T PoE ports	4*100/1000B ase-X uplink SFP ports 16*10/100/1000Base-T PoE ports	8*100/1000B ase-X uplink SFP ports 16*10/100/1000Base-T PoE ports	4*100/1000 Base-X uplink SFP ports 24*10/100/1000Base-T PoE ports
Ethernet Port	10/100/1000Base-T(X) ports supports auto-sensing, full/ half duplex MDI/ MDI-X self-adaption			
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meters) 100BASE-TX: Cat5 or later UTP(≤100 meters) 1000BASE-T: Cat5e or later UTP(≤100 meters)			
SFP Port	Gigabit SFP optical fiber interface, default no include optical modules (optional single-mode/ multi-mode, single fiber/ dual fiber optical module. LC)			
Optical Cable / Distance	Multi-mode: 850nm /O-550m Single-mode: 1310nm /O-40km, 1550nm /O-120km.			

Chipset Parameters				
Network Management Type	L2+			
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T,IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3x			
Forwarding Mode	Store and Forward (Full Wire Speed)			
Switching Capacity	20 Gbps (Non-blocking)	40Gbps (Non-blocking)	52Gbps (Non-blocking)	56Gbps (Non-blocking)
Forwarding Rate @64byte	14.88Mpps	29.78Mpps	35.71Mpps	41.7Mpps
CPU	500MHz	500MHz	-	500MHz
DRAM	1G	1G	-	1G

FLASH	128M	256M	-	256M
MAC	8K	8K	8K	8K
Buffer Memory	4.1M	4.1M	8M	4.1M
Jumbo Frame	10K	10K	9.6K	10K
LED Indicators	Power: PWR(Yellow), System: SYS(Yellow) Network: Link/Act(Yellow), POE: PoE (Green), Fiber port: L/A(Green)			
Reset Switch	Yes, One-button for factory reset			

PoE & Power Supply

PoE Port	1 to 8	1 to 16	1 to 16	1 to 24
PoE Management	PoE working status Delay start of power supply PoE output priority configuration Scheduling of PoE operation and time Total power limit of PoE power supply PoE output power allocation, on/off & af/at			
Power Supply Pin	1/2(+) 3/6(-)			
Max Power Per Port	30W, IEEE 802.3 af/at			
Total PWR / Input Voltage	2*120W/48VDC	2*400W(AC100-240V)	2 * 120W (48VDC) or 240W (48VDC)	2*600W(AC100-240V)
Power Consumption	Standby<8W, Full load<120W	Standby<18W, Full Load<380W	Standby<15W, Full Load af<240W, at<480W	Standby<22W, Full Load<600W

Input Voltage / Interface	DC48-57V, 5P industrial phoenix terminal, support anti-reverse protection.	1 group of DC48-57V input ports Power-down alarm switch port, 2*AC power input ports Dual input power port: AC power supply priority, support anti-reverse protection, power-off automatic switching DC connection.	DC48-57V, 5P industrial phoenix terminal, support anti-reverse protection.	1 group of DC48-57V input ports Power-down alarm switch port, 2*AC power input ports Dual input power port: AC power supply priority, support anti-reverse protection, power-off automatic switching DC connection.
Power Supply	No, optional 48V/120W or 48V/240W industrial power supply	Built-in power supply, AC100-240V 50-60Hz 2*5A	No, optional 48V/240W or 48V/480W industrial power supply	Built-in power supply, AC100-240V 50-60Hz 2*6.6A

Physical Parameters

Operation TEMP / Humidity	-40°C~+75°C, 5%~95% RH Non condensing	-40°C~+80°C, 5%~90% RH Non condensing		
Storage TEMP / Humidity	-40°C~+85°C, 5%~95% RH Non condensing			
Ingress Protection	IP40	IP30	IP40	IP30
Lighting Protection	6KV 8/20us IEC61000-4-2(ESD):±8kV contact discharge,±15kV air discharge IEC61000-4-3(RS):10V/m(80-1000MHz) IEC61000-4-4(EFT): power cable:±4kV; data cable:±2kV IEC61000-4-5(Surge):power cable:CM±4kV/DM±2kV; data cable:±4kV IEC61000-4-6(radio frequency transmission):10V(150kHz-80MHz) IEC61000-4-8(power frequency magnetic field):100A/m;1000A/m, 1s to 3s IEC61000-4-9(pulsed magnet field):1000A/m IEC61000-4-10(damped oscillation):30A/m 1MHz IEC61000-4-12/18(shockwave):CM 2.5kV,DM 1kV IEC61000-4-16(common-mode transmission):30V; 300V,1s FCC Part 15/CISPR22(EN55022):Class B IEC61000-6-2(Common Industrial Standard)			
Mechanical Properties	IEC60068-2-32 (Free fall) IEC60068-2-6 (Anti vibration), IEC60068-2-27 (Anti shock)			
Dimension (L*W*H)	165*148*54mm	440*378*44.5mm	166*149*89mm	440*378*44.5mm
Net / Gross Weight	<0.8kg / <1.2kg	<5.2kg / <5.5kg	<2.2kg / <2.8kg	<5.6kg / <6.3kg
Installation	Desktop, DIN rail	Desktop, 19-inch 1U cabinet	Desktop, DIN rail	Desktop, 19-inch 1U cabinet

Certification

CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS

Software Features

Interface	<p>IEEE802.3x flow control (Full duplex) Broadcast storm suppression based on port rate Port real-time traffic management (Flow Interval) Limit the rate of packet traffic on incoming and outgoing ports, with min. granularity is 16Kbps and max is 1Gbps</p>			
Layer 3 Features	<p>IPv4 static route/default route, max entries 128 L2+ network management function, ARP protocol, max 1024 entries</p>			
VLAN	<p>Port-based VLAN (4K), VLAN based on the protocol IEEE802.1q, Port configuration of Access, Trunk, Hybrid</p>			
Port Aggregation	<p>LACP dynamic aggregation, static aggregation, 8 ports per group</p>			
Max. Agg. Group	8	10	12	14
Spanning Tree	<p>STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)</p>			
Industrial Ring Network Protocol	<p>G.8032 (ERPS), Recovery time less than 20ms, 250 Ring at most, Max 250 devices per ring.</p>			
Multicast	<p>MLD Snooping v1/v2, Multicast VLAN, User quick exit mechanism IGMP Snooping v1/v2, Max 1024 multicast groups</p>			
Port Mirroring	<p>Bidirectional data mirroring based on port</p>			
QoS	<p>Queue scheduling algorithm (SP, WRR, SP+WRR) Flow-based rate limiting, Flow-based packet filtering Flow-based based redirection, 8*Output queues of each port 802.1p/ DSCP priority mapping, Diff-Serv QoS, Priority Mark/ Remark</p>			
ACL	<p>Port-based and VLAN-delivered ACL The L2-L4 packet filtering function can match the first 80 bytes of the packet and provide information based on source MAC address, destination MAC address, source IP address, destination IP address, IP protocol type, TCP/UDP port, TCP/UDP port range, and VLAN.</p>			
Security	<p>IP-MAC-VLAN-Port binding ARP intrusion detection function ARP message rate limiting function Port-based IEEE802.1X certification Port broadcast message suppression SSL ensures data transmission security Port isolation, IP source address protection Host data backup mechanism, Anti-DoS attack Limit on the number of MAC addresses learned AAA&RADIUS certification, MAC address black hole User hierarchical management and password protection SSH 2.0 provides a secure encrypted channel for user login</p>			

DHCP	DHCP Client, DHCP Snooping, DHCP Server, DHCP Relay
Management	<p>Web network management (https) View CPU real-time utilization status Link Layer Discovery Protocol (LLDP) NTP clock, SNMP V1/V2/V3, System work log One click recovery, Ping detection, Cable status check Rubisec NMS platform cluster management (LLDP+SNMP) Console/ AUX Modem/ Telnet/ SSH2.0 and CLI configuration FTP, TFTP, Xmodem, SFTP file upload and download management</p>
System	<p>Category 5 and above Ethernet cables Web browser: Mozilla Firefox 2.5 or higher, Google Chrome V42 or higher, MicrosoftInternet Explorer 10 or higher TCP/IP, network adapters, and network operating systems (such as Microsoft Windows, Linux, or Mac OS X) are installed on each computer in the network over Category 5 and above Ethernet cables.</p>

Packing List	Content	Qty	Unit
Packing List	Full gigabit managed L2+ Industrial switch	1	SET
	RJ45-DB9 Line	1	PC
	AC Power Cable	1*	PC
	Mounting Kits (Hanging Ear)	1*	SET
	User Guide	1	PC
	Warranty Card	1	PC

* Not for RS-IS-200-10GP and 24GP.

Ordering Information	
Model	Description
RS-IS-200-10GP	L2+ gigabit managed industrial PoE switch with 8*10/100/1000BaseT ports and 2*100/1000Base-X SFP ports. Port 1-8 can support IEEE802.3af/at PoE standard. Support dual DC power supply input and DIN rail mounting.
RS-IS-200-20GP	L2+ gigabit managed industrial PoE switch with 16*10/100/1000Base-T ports and 4*100/1000Base-X SFP ports. Port 1-16 support IEEE 802.3 af/at PoE standard. It support 2AC+DC redundant power terminal input and 1U/19-inch cabinet installation.
RS-IS-200-24GP	L2+ gigabit managed industrial PoE fiber switch with 16*10/100/1000Base-T ports and 8*100/1000Base-X SFP slot ports. Port 1-16 can support IEEE 802.3 af/at PoE standard. It can support DC dual power supply input and DIN rail mounting.
RS-IS-200-28GP	L2+ gigabit managed industrial PoE switch with 24*10/100/1000Base-T ports and 4*100/1000Base-X SFP ports. Port 1-24 support IEEE 802.3 af/at PoE standard. It support 2AC+DC redundant power terminal input and 1U/19-inch cabinet installation.