

QUANT 6600 INDUSTRIAL GIGABIT POE+ SWITCH SERIES



Q-IE-6600-28P-L3-4G-E



Q-IE-6600-48P-L3-4G-E

PRODUCT OVERVIEW

The **Quant 6600 Industrial PoE Switch Series** delivers high-performance, secure, and intelligent Layer 3 switching designed for modern industrial networks, enterprise backbones, and mission-critical infrastructure.

Available in 28-port and 48-port Gigabit PoE+ configurations, both models feature four 1/10 Gigabit SFP+ uplink ports, providing flexible high-speed fiber connectivity for network aggregation and core layers. These switches combine Layer 3 routing, advanced redundancy, and robust PoE+ power delivery, making them ideal for transportation systems, smart cities, utilities, and large-scale surveillance deployments.

Each RJ45 downlink port supports IEEE 802.3af/at PoE+ with up to 30 W per port, enabling direct power supply to devices such as IP cameras, wireless access points, and VoIP terminals. The total PoE power budget is optimized for dense deployments—400 W for 28-port models and 600 W for 48-port models, ensuring reliable operations in environments with high power demands.

The Quant 6600 Series features a non-blocking switching architecture, IPv4/IPv6 dual-stack support, dynamic routing (RIP/OSPF/BGP), and advanced security protocols for full network control. Industrial-grade surge protection, dual power inputs, and wide operating temperature tolerance ensure continuous operation even in harsh field conditions.

PRODUCT FEATURE

- **High-Performance Layer 3 Switching**
 - IPv4/IPv6 dual-stack, RIP/OSPF/BGP routing
 - Non-blocking switching fabric for wire-speed forwarding
 - Ideal for industrial core, aggregation, or high-density access layers
- **Intelligent PoE+ Power**
 - IEEE 802.3af/at compliant, 30 W per port
 - Total PoE budget: 400 W (28-port) / 600 W (48-port)
 - Dynamic power allocation and priority scheduling for critical devices
- **Advanced Network Security**
 - 802.1X authentication, IP-MAC-Port binding, DHCP Snooping
 - ACLs and port isolation to prevent unauthorized access
 - Secure management with HTTPS, SSH, RADIUS/TACACS+ support

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PRODUCT FEATURE

- Resilient Industrial Design**
 ERPS (<20 ms recovery), STP/RSTP/MSTP for loop protection
 6 kV surge protection, IP30-rated metal housing
 -40 °C to +75 °C operating temperature
- Comprehensive Management**
 Web GUI, CLI, SNMP v1/v2/v3, Telnet, HTTPS/SSH
 LLDP discovery, sFlow, and cloud management compatibility for centralized control
 Real-time system monitoring and diagnostics

TECHNICAL SPECIFICATION

Model	Downlink PoE Ports	SFP Uplink	Network Protocol	Transmission Distance
Connectivity				
Q-IE-6600-28P-L3-4G-E	24 × 10/100/1000 Mbps PoE+	4 × 1/10G SFP+	IEEE 802.3af/at	100 m
Q-IE-6600-48P-L3-4G-E	48 × 10/100/1000 Mbps PoE+	4 × 1/10G SFP+	IEEE 802.3af/at	100 m

- Multi-mode fiber: up to 550 m (10G: 300 m), LC interface, DDM support, hot-swappable
- Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km, LC/SC interface, supports DDM function and hot plugging

Model	Switching Capacity	Forwarding Rate	MAC Address Table	Buffer Memory	Jumbo Frame	CPU	Forwarding Mode	Input Voltage
Performance and Efficiency								
Q-IE-6600-28P-L3-4G-E	176 Gbps	95.23 Mpps	32 K	32 M	9.6 K	500 MHz	Store-and-forward	400W
Q-IE-6600-48P-L3-4G-E	176 Gbps	131 Mpps	32 K	32 M	9.6 K	500 MHz	Store-and-forward	600W

- STP / RSTP / MSTP / ERPS ring protection with <20 ms recovery
- Dual firmware images and watchdog protection
- 40 °C to +75 °C operating temperature
- 6 kV surge protection and IP30-rated enclosure
- Certified to CE, FCC, RoHS, and IEC standards

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TECHNICAL SPECIFICATION



Model	Q-IE-6600-28P-L3-4G-E	Q-IE-6600-48P-L3-4G-E
Interface Characteristics		
Fixed Port	2*AC100-240V input ports 1*Console RS232 port (115200, N, 8,1) 4*1/10G uplink SFP+ fiber ports (Data) 24*10/100/1000Base-T PoE ports (Data/ Power) 2*DC48-57V input ports (support reverse polarity protection)	2*AC100-240V input ports 1*Console port (115200, N, 8,1) 4*1/10G uplink SFP+ fiber ports (Data) 48*10/100/1000Base-T PoE ports (Data/Power) 2*DC48-57V input ports (support reverse polarity protection)
Ethernet Port	Port 1-24 can support 10/100/1000Base-T(X) auto-sensing, full/ half duplex MDI/ MDI-X self-adaption	Port 1-48 can support 10/100/1000Base-T 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)	
Optical Fiber Port	Default no include optical module (optional single-mode/ multi-mode, single fiber/ dual fiber optical module. LC)	
Optical Fiber Port Expansion	Turbo overclocking 2.5G optical module expansion and ring network	-
Chip Parameter		
Network Management Type	L3	
DRAM	2G	4G
FLASH	128M	256M
LED Indicator	PoE: PoE (Green), Fiber port: L/A (Green), System: SYS (Green), Network: Link (Yellow)	Power: PWR(Yellow), System: SYS(Green), Network: Link/Act (Yellow), PoE: PoE (Green), Fiber port: L/A (Green)
Reset Switch	Yes, press and hold the switch for 10 seconds and release it to restore the factory settings	

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TECHNICAL SPECIFICATION

Model	Q-IE-6600-28P-L3-4G-E	Q-IE-6600-48P-L3-4G-E
PoE& Power Supply		
PoE Port	Port 1-24	Port 1 to 48
PoE Management	PoE power supply total power limit configuration Power delay start, PoE work and time scheduling Port PoE working status display, Port PoE output priority configuration Port PoE output power distribution, PoE on/off, af/at power distribution	
Power Supply Pin	1/2(+) 3/6 (-)	
Power Consumption	Standby<25W, full load<400W	Standby<35W, Full load<600W
Power Supply	Built-in power supply, AC100~240V 50-60Hz, 5.0A	Built-in power supply, AC100~240V 50-60Hz, 6.6A
Power Input Port	Alarm switch port, 2*AC power input ports, 2*DC48-57V input ports Dual input power port design: AC power supply priority to support anti-reverse connection protection, and automatically switches to DC connection when power fails.	
Physical Parameter		
Operation Temp/ Humidity	-40~+80°C, 5%~90% RH Non condensing	
Storage Temp/ Humidity	-40~+85°C, 5%~95% RH Non condensing	
Dimension (L*W*H)	440*378*44.5mm	
Weight	6.2kg	7.5 kg
Installation	Desktop, 1U/19" cabinet	
Certification & Warranty		
Lighting Protection	IEC61000-4-3(RS):10V/m (80~1000MHz) FCC Part 15/CISPR22 (EN55022): Class A IEC61000-6-2 (Common Industrial Standard) 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 Protection level: IP30, Lightning protection: 6kV 8/20us IEC61000-4-4(EFT): Power cable:±4kV, Data cable: ±2kV IEC61000-4-16 (Common-mode transmission): 30V, 300V, 1s IEC61000-4-2 (ESD): ±8kV contact discharge, ±15kV air discharge IEC61000-4-6 (Radio frequency transmission): 10V(150kHz~80MHz) IEC61000-4-8 (Power frequency magnetic field):100A/m,1000A/m,1-3s IEC61000-4-5(Surge): Power cable: CM±4kV/DM±2kV, Data cable: ±4kV	

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TECHNICAL SPECIFICATION

Model	Q-IE-6600-28P-L3-4G-E	Q-IE-6600-48P-L3-4G-E
Certification & Warranty		
Mechanical Properties	IEC60068-2-6 (Anti Vibration), IEC60068-2-32 (Free Fall), IEC60068-2-27 (Anti Shock)	
Certification	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class A, RoHS	
Country of Origin	Vietnam	
Warranty	2 Years	

ORDERING INFORMATION

Model	Description	Input Voltage
Q-IE-6600-28P-L3-4G-E	28-Port Industrial Gigabit PoE+ L3 Managed Switch with 4 × 1/10G SFP+ uplinks	400W
Q-IE-6600-48P-L3-4G-E	48-Port Industrial Gigabit PoE+ L3 Managed Switch with 4 × 1/10G SFP+ uplinks	600W

