



## PRODUCT OVERVIEW

- o QQ-SW-155 Series Uses store-and-forward technology, combined with dynamic memory allocation, to ensure the effective bandwidth allocated to each port.
- o QASA Switches are easy to use and can flexibly expand home and office networks without limitation of power line layout. It is easy to manage and maintain and meets the requirements of different scenarios.
- o QASA series are Web Smart Managed PoE Switches independently developed by Quantum. It provides 48\*10/100/1000Mbps RJ45 ports and 6\*1000Mbps SFP slots. Each RJ45 port supports the PoE power supply function and complies with IEEE 802.3af/at standards.
- o Supports enterprise-class features, including VLAN types (Data, Private, Guest (802.1x) auto-voice VLAN, Multicast TV VLAN), Port Mirroring, STP/RSTP/MSTP, Link Aggregation Control Protocol and 802.3x Flow Control function.
- o It provides high performance, enterprise-level QoS, advanced security strategies, these smart managed switches are a versatile solution for deployments that require easy configuring functionality without added complexities.
- o Two-year limited liability manufacturer's warranty from day one.

## HIGHLIGHTS

- o **Large support of IEEE standards.**  
Supports IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x, IEEE 802.1X, IEEE 802.1q, IEEE 802.1p, IEEE 802.1d, IEEE 802.1w, IEEE 802.3ad.
- o **Enhanced QoS.**  
Switch support configurable QoS queues for converged voice, video, and data applications.
- o **Reliable performance.**  
Delivers Stability, Scalability, and Effortless handling of diverse workloads.
  - o The switch supports a non-blocking architecture that provides from 20 Gbps to 216 Gbps of wire-speed switching capacity and from 14.88 to 160.70 Mpps of forwarding capacity, allowing it to handle a wide range of workloads.
  - o For better network security, the switch supports multiple authentication methods, including 802.1x and MAC authentication. The switch provides identity-driven security and controls via granular Access Control Lists (ACLs).
- o **Easy to manage.**  
Switch can be managed through web, CLI (Telnet, SSH), SNMP and RMON.

FEATURE	SPECIFICATIONS						
<b>Communication Ports- QQ-SW-155-Series</b>							
	1G RJ45 Port	1G SFP Uplink Port	10G SFP+ Uplink Port	Console Port (RJ-45)	Power Budget (Watt)	Max PoE (802.3af)	Max PoE+ (802.3at)
QQ-SW-155-G48P-6SFPP	48	--	6	1	880	48	24
QQ-SW-155-G48-6SFPP	48	--	6	1	--	--	--
QQ-SW-155-GF24-4SFPP-DAC	--	24	4	1	--	--	--
QQ-SW-155-G24FP-4SFPP	24	--	4	1	720	24	24
QQ-SW-155-G24P-4SFPP	24	--	4	1	400	24	12
QQ-SW-155-G24P-4SFPP-DAC	24	--	4	1	400	24	12
QQ-SW-155-G24-4SFPP	24	--	4	1	--	--	--
QQ-SW-155-G24-4SFPP-DAC	24	--	4	1	--	--	--
QQ-SW-155-G16FP-4SFPP	16	--	4	1	480	16	16
QQ-SW-155-G16P-4SFPP	16	--	4	1	260	16	8
QQ-SW-155-G16-4SFPP	16	--	4	1	-	-	-
QQ-SW-155-G8FP-2SFP	8	2	--	1	280	8	8
QQ-SW-155-G8P-2SFP	8	2	--	1	140	8	4
QQ-SW-155-G8-2SFP	8	2	--	1	-	-	-
Capacity	48 Port		24 Port		16 Port		8 Port
Switching capacity	216 Gbps		128 Gbps		112 Gbps		20 Gbps
Forwarding rate	160.70 Mpps		95.23 Mpps		83.32 Mpps		14.88 Mpps
Packet buffer	12 Mbit		12 Mbit		12 Mbit		8 Mbit
MAC address table	16k Entries		16k Entries		16k Entries		8k Entries
VLANs	4096		4096		4096		4096
Maximum jumbo frame size	9,216 bytes		9,216 bytes		9,216 bytes		9,216 bytes
Link aggregation groups	Max 8		Max 8		Max 8		Max 8
Link aggregation ports per group	Max 8		Max 8		Max 8		Max 8
QoS priority queues	8 per port		8 per port		8 per port		8 per port
<b>Quality of Service</b>							
Hardware queues			Ingress / Egress rewrite				
DSCP to DSCP mapping			Drop-precedence				
DSCP to DP mapping			Internal-priority				
DSCP to Queue mapping			VLAN Based class of service				
COS to DP mapping			Port Based class of service				
COS to Queue mapping			802.1p/COS/DSCP/IP precedence				
Trust COS/DSCP			QoS Based on TCP/UDP (IPv4/IPv6)				

SP/WRR/WDRR	Ingress/Egress rate limiting
Aggregate policy map	IPv4/IPv6 QoS (QCEs)
CAR stream shaping (leak algorithm)	
<b>Layer 2</b>	
MAC notification	Q-in-Q (Double tag)
STP, RSTP, MSTP	Selective / Flexible Q-in-Q
Management VLANs	Auto MDI/MDIX
Private VLANs	BPDU Guard
GVRP/GMRP	IGMP/IGMP snooping v1/v2/v3*
MAC based VLANs	MTU
802.1v protocol VLAN	MRPP
Multicast VLAN	ERPS
Auto voice VLAN	Auto surveillance VLAN
VLAN translation/N:1 VLAN translation	MVR
Guest VLAN	Fast leave
IGMP proxy	Loopback detection
MLD snooping v1/v2	CFM (802.1ag)
Port mirroring	EFM OAM (802.3ah)
Link aggregation with LACP	DDM
Jumbo frame	Virtual cable test
<b>Layer 3 ( Essential )</b>	
Static routing	DHCP server
Static ARP	DHCPv6 server
Route aggregation	
<b>Security</b>	
Port security	IPv6 ACL
Port isolation	Management access list
ARP scanning prevention	Management ACL/Management ACE
ARP spoofing prevention	IP source guard (IP-MAC-Port-VLAN Binding)
ARP guard	IP source guard (IP-MAC-Port Binding)
Gratuitous ARP	Dynamic ARP inspection
ARP quantity control	Storm control
Anti ICMP attack	RADIUS/TACACS+
ICMP rate limit	RADIUS authentication (RFC2138)
ICMP unreachable drop	DDoS prevention (TCP flag, TCP fragment, IP segment, ICMP)
802.1x Port/MAC based authentication	HTTPs and SSL (secured web)
802.1x EAP support	SSH v1.5/v2.0 (secured telnet session)
L2+/L3/L4 ACL	DHCP snooping

MAC ACL	DHCP option 82/43/60/61/66/67
Time based ACL	DHCP relay
<b>Management</b>	
RMON (1,2,3 & 9 groups)	RSPAN
FTP/TFTP	Configuration Export/Import
SNMP (v1, v2c, v3)	Syslog
Firmware Upgrade/Backup	HTTP/HTTPS
Software/Hardware watchdog	Telnet
CPU protect	LLDP/LLDP-MED
MRRP (ERRP compatible)	UDLD
ULPP (Uplink Protection Protocol)	DNS client
Smart link/Monitor link	Cable test
Uplink State Monitor	DDMI
Port/CPU/Flow based mirroring	NTP/ SNTP(RFC2030)
<b>IPv6 Support</b>	
Dual IPv6/IPv4 stack	IPv6 SNMP
IPv6 Web/SSL	IPv6 IPsec support
IPv6 SNTP (Simple network time protocol)	IPv6 ND snooping
IPv6 Telnet / SSH	DHCPv6 relay
IPv6 Ping / Traceroute	DHCPv6 snooping
IPv6 TFTP	IPv6 SAVI
IPv6 RADIUS/TACACS+	HTTP over IPv6
<b>ONVIF</b>	
ONVIF detection	ONVIF server (NLM)
<b>Standard Compliance</b>	
<b>IEEE Standards Compliance</b>	
802.1AB LLDP/ LLDP-MED	802.3ae 10 gigabit ethernet
802.1D MAC bridging	802.3at power over ethernet Plus
802.1p mapping to priority queue	802.3u 100 Base-TX
802.1s Multiple Spanning Tree (MST)	802.3x flow control
802.1w Rapid Reconfiguration of Spanning Tree (RSTP)	802.3z 1000Base-SX/LX
802.1x Port-based Network Access Control (PNAC)	802.3 MAU MIB (RFC 2239)
802.3 Carrier Sense Multiple Access/Collision Detection (CSMA/CD)	802.1Q VLAN tagging
802.3ab 1000BASE-T	802.3az Energy Efficient Ethernet
802.3 10 Base-T	802.3af Power over Ethernet
802.3ad link aggregation (Dynamic and Static)	

### Monitoring and Troubleshooting

Err disable detection and recovery	CPU utilization
Device temp/PSU/FAN/status display & alarm	User operation logs
Virtual cable test	Management logs, alarms
ICMPv4/v6	DDM (Digital Diagnostic Monitoring)
Traceroute	UDLD (Unidirectional Link Detection)

Physical	Net Weight	Dimensions	MTBF (25°C)
G48P-6SFPP (PoE)	4.12 Kg	440x260x44mm (LxWxH)	1,00,000 Hours
G48-6SFPP (Non PoE)	3.15 Kg	440x260x44mm (LxWxH)	1,00,000 Hours
GF24-4SFPP-DAC	3.1 Kg	440x207x44.5 mm (LxWxH)	1,00,000 Hours
G24FP-4SFPP (Full PoE)	4.01 Kg	440x207x44.5 mm (LxWxH)	1,00,000 Hours
G24P-4SFPP (PoE)	3.36 Kg	440x207x44.5 mm (LxWxH)	1,00,000 Hours
G24P-4SFPP-DAC	3.75 Kg	440x207x44.5 mm (LxWxH)	1,00,000 Hours
G24-4SFPP (Non PoE)	2.71 Kg	440x207x44.5 mm (LxWxH)	1,00,000 Hours
G24-4SFPP-DAC	3.1 Kg	440x207x44.5 mm (LxWxH)	1,00,000 Hours
G16FP-4SFPP (Full PoE)	3.09 Kg	440x207x44 mm (LxWxH)	1,00,000 Hours
G16P-4SFPP (PoE)	2.93 Kg	440x207x44 mm (LxWxH)	1,00,000 Hours
G16-4SFPP (Non PoE)	1.82 Kg	440x207x44 mm (LxWxH)	1,00,000 Hours
G8FP-2SFPP (Full PoE)	2.37 Kg	280x180x44 mm (LxWxH)	1,00,000 Hours
G8P-2SFPP (PoE)	1.86 Kg	280x180x44 mm (LxWxH)	1,00,000 Hours
G8-2SFPP (Non PoE)	1.35 Kg	280x180x44 mm (LxWxH)	1,00,000 Hours

### Environment

Operating temperature	-5°C ~ 55 °C
Storage temperature	-40 °C ~ 70 °C
Operating humidity	- 5% ~ 95% non-condensing
Storage humidity	5% ~ 90% non-condensing
Surge protection	Differential mode ±2KV Common mode ±4KV
MTBF	>100000 hour

### Certification & Compliances

Regulatory	FCC
Standard	IEC-60950
Environmental	CE
	RoHS

## ORDERING INFORMATION

Part Number	Description
QQ-SW-155-G48P-6SFPP	Networking managed switch, 48×1G Base T ports, 6×10G SFP uplink-ports, 880W power budget, 2 years warranty.
QQ-SW-155-G48-6SFPP	Networking managed switch, 48×1G Base T ports, 6×10G SFP uplink-ports, 2 years warranty.
QQ-SW-155-GF24-4SFPP-DAC	Networking Managed Switch, 24×1G SFP ports, 4×10G SFP+ Uplink-ports, 2 Years Warranty, Dual Redundant AC Power supply.
QQ-SW-155-G24P-4SFPP	Networking managed switch, 24×1G Base T ports, 4×10G SFP uplink-ports, 720W power budget, 2 years warranty.
QQ-SW-155-G24P-4SFPP	Networking managed switch, 24×1G Base T ports, 4×10G SFP uplink-ports, 400W power budget, 2 years warranty.
QQ-SW-155-G24P-4SFPP-DAC	Networking Managed Switch, 24×1G Base T ports with 400W Power Budget, 4×10G SFP+ Uplink-ports, 2 Years Warranty, Dual Redundant AC Power supply.
QQ-SW-155-G24-4SFPP	Networking managed switch, 24×1G Base T ports, 4×10G SFP uplink-ports, 2 years warranty.
QQ-SW-155-G24-4SFPP-DAC	Networking Managed Switch, 24×1G Base T ports, 4×10G SFP+ Uplink-ports, 2 Years Warranty, Dual Redundant AC Power supply.
QQ-SW-155-G16FP-4SFPP	Networking managed switch, 16×1G Base T ports, 4×10G SFP uplink-ports, 480W power budget, 2 years warranty.
QQ-SW-155-G16P-4SFPP	Networking managed switch, 16×1G Base T ports, 4×10G SFP uplink-ports, 260W power budget, 2 years warranty.
QQ-SW-155-G16-4SFPP	Networking managed switch, 16×1G Base T ports, 4×10G SFP uplink-ports, 2 years warranty.
QQ-SW-155-G8FP-2SFP	Networking managed switch, 8×1G Base T ports, 280W power budget, 2×1G SFP uplink-ports, 2 years warranty
QQ-SW-155-G8P-2SFP	Networking managed switch, 8×1G Base T ports, 140W power budget, 2×1G SFP uplink-ports, 2 years warranty
QQ-SW-155-G8-2SFP	Networking managed switch, 8×1G Base T ports, 2×1G SFP uplink-ports, 2 years warranty