QASA SWITCHES

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 up to 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

Communication Ports- QQ-SW-155-Series

	1G RJ45 Port	1G SFP Uplink Port	10G SFP+ Uplink Port	Combo Uplink Ports	Console Port (RJ-45)	Power Budget (Watt)	Max PoE (802.3af)	Max PoE+ (802.3at)
G48P-6SFPP	48	--	6	--	1	740	48	24
G48-6SFPP	48	--	6	--	1	--	--	--
GF24-4SFPP-DAC		24	4	--	1	--	--	--
G24FP-4SFPP	24	--	4	--	1	740	24	24
G24P-4SFPP	24	--	4	--	1	370	24	12
G24P-4SFPP-DAC	24	--	4	--	1	370	24	12
G24-4SFPP	24	--	4	--	1	--	--	--
G24-4SFPP-DAC	24	--	4	--	1	--	--	--
G24-4SFP	24	2	--	2	1	--	--	--
G16FP-4SFPP	16	--	4	--	1	480	16	16
G16P-4SFPP	16	--	4	--	1	250	16	8
G16-4SFPP	16	--	4	--	1	-	-	-
G8FP-2SFP	8	2	--	--	1	250	8	8
G8P-2SFP	8	2	--	--	1	140	8	4
G8-2SFP	8	2	--	--	1	--	--	--
8SFPP	--	--	8	--	1	--	--	--

Capacity

Capacity	48 Port	24 Port	24 Port–4SFP	16 Port	8 Port	8Fiber Port
Switching capacity	216 Gbps	128 Gbps	56 Gbps	112 Gbps	20 Gbps	160 Gbps
Forwarding rate	160.70 Mpps	95.23 Mpps	41.66 Mpps	83.32 Mpps	14.88 Mpps	119.04 Mpps
Packet buffer	12 Mbit	12 Mbit	8 Mbit	12 Mbit	8 Mbit	8 Mbit
MAC address table	16k Entries	16k Entries	8k Entries	16k Entries	8k Entries	8k Entries
VLANs	4096	4096	4096	4096	4096	4096
Maximum jumbo frame size	10k	10k	10k	10k	10k	10k
Link aggregation groups	Max 8	Max 8	Max 8	Max 8	Max 8	Max 8
Link aggregation ports per group	Max 8	Max 8	Max 8	Max 8	Max 8	Max 8
QoS priority queues	8 per port	8 per port	8 per port	8 per port	8 per port	8 per port

Quality of Service

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

* The PoE power budget will be –30 or +30 watts, depending on the current power budget.

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)	

Layer 2

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

Layer 3 (Essential)

Static routing	DHCP server, DHCPv6 server
Static ARP	Route aggregation

Security

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
Management	
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)
IPv6 Support	
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
ONVIF	
ONVIF detection	ONVIF server (NLM)
Standard Compliance	
IEEE Standards Compliance	
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
G24-4SFP	2.5 Kg	440x207x44.5mm (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-2SFP (PoE)	1.86 Kg	280x180x44 mm (LxWxH)	1,00,000 Hours
G8-2SFP (Non PoE)	1.35 Kg	280x180x44 mm (LxWxH)	1,00,000 Hours
QQ-SW-155-8SFPP	1.30 Kg	195x165x40 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
Voltage Input	100-240V AC. Frequency: 50/60 Hz

Packaging Content

Switch with type D power cord with rack mounting kit

CERTIFICATION & COMPLIANCES*

Certifications	Parameter	Standards
Environmental Compliances & Regulatory	CE, FCC	EU safety, health, and environmental protection
	RoHS	Restriction of Hazardous Substances
Regulatory (IN)	BIS	IS-13252, IEC-60950 (Ensuring safety and reliability of IT and telecom equipment.)
	MTCTE (ER)	EMI/EMC (IEC / EN-61000* & CISPR 32)
		Safety (IS-13252 & IEC-60950)

*For detailed information on certifications apply to each model within the series mentioned in this datasheet, please visit www.qntmnet.com/certification/ or email us at sales@qntmnet.com.

ORDERING INFORMATION

Part Number	Description
QQ-SW-155-G48P-6SFPP	Networking managed switch, 48×1G Base T ports, 6×10G SFP uplink-ports, 740W 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-G24FP-4SFPP	Networking managed switch, 24×1G Base T ports, 4×10G SFP uplink-ports, 740W power budget, 2 years warranty.
QQ-SW-155-G24P-4SFPP	Networking managed switch, 24×1G Base T ports, 4×10G SFP uplink-ports, 370W 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-G24-4SFP	Networking Managed Switch,24x1G Base T ports,2x1G combo uplink-ports,2x1G SFP uplink ports,2 years warranty.
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, 250W 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, 250W 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.
QQ-SW-155-8SFPP	Networking managed switch, 8x10Gbps SFP+ Ports,2 years warranty.