



## **QSW-4416CM**

 $16 \times 1G/2.5G$ , RJ45 + 4 × 1G/10G SFP+ L2+ Managed Ethernet Switch

The next generation Ethernet switch in high-density port configuration leveraged NBase-T multigigabit technology, QSW-4416CM, is designed for enterprise or service provider to migrate to the reliable and secure Ethernet based high speed network access by connecting the existed Cat5e/Cat6 cabling infrastructure from 1Gbps to multigigabit speed. It is ideal solution to save your investment without disruptive and expensive wiring reconstruction required for offering more bandwidth capacity.

The latest content richer application and technology such as WiFi 6/6E wireless access and 4K UHD video streaming or IP surveillance make the standard gigabit reveal the problem of bandwidth insufficiency. QSW-4416CM is equipped 16 ports 1G/2.5G RJ45 and 4 slots 1G/10G SFP+ uplink. It offers 2.5Gbps and 10Gbps connectivity to fulfill the bandwidth consumed popular network gears.

It is featured completely L2+ switch functionality which guarantees high network availability, robust network access and security as well as comprehensive QoS in the network edge. It will deliver the benefits of optimal traffic transportation performance and lower ownership cost while maintaining the network deployment simply.

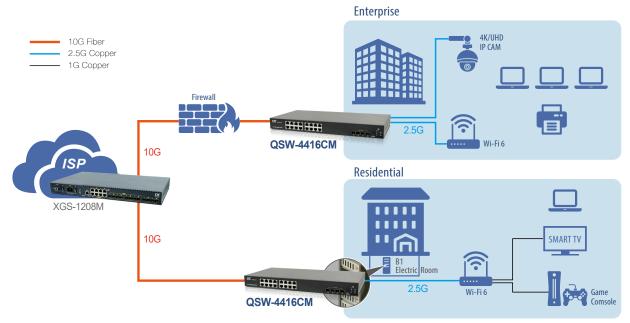
## // Specifications

Interface	Fiber port: 4 x 1G/10G SFP+
	Copper port: 16 × 1G/2.5G RJ45
	Console port: RS-232 in USB type C
Packet forwarding rate	14880pps @10Mbps
	148800pps @100Mbps
	1488000pps @1000Mbps
	3720000pps @2.5Gbps
	14880000pps @10Gbps
Switching Fabric Capacity	160Gbps
Transmission method	Store and Forward Switching
Packet buffer	32M bits
MAC table size	32K
Jumbo frame size	10K Bytes
VLAN feature	IEEE 802.1Q tagged VLAN (4K VLAN groups); IEEE 802.1ad QinQ VLAN;
	Voice VLAN; MAC based VLAN; Protocol based VLAN; IP subnet based VLAN;
	Private VLAN for port isolation; VLAN translation; GVRP(GARP VLAN registration protocol)
Link aggregation	Static trunk (SA, DA, IP, TCP/UDP port); IEEE 802.3ad LACP, 10 LACP trunk groups Max;
	8 port Max. per LACP trunk; IEEE 802.1AX
_2 switching protection	IEEE 802.1D STP/IEEE 802.1w RSTP/IEEE 802.1s MSTP; Loop Protection
QoS feature	Hard wired IEEE 802.1p 8 priority queues per port;
	Traffic scheduling based on strict/WRR priority;
	CoS based traffic classification on switch port; VLAN ID; DSCP; TCP/UDP port;
	IEEE 802.1p priority tag remarking; DSCP remarking;
	Per Port/Queue based ingress/egress rate limit in steps of 100kbps;
	IEEE 802.3x flow control; IEEE 802.1Qbb priority based full-duplex flow control;
	Multicast/Broadcast/Unicast storm control with flooding control
Security	Static port security (MAC based); Per port limited MAC learning;
	Port based/MAC base/single/multiple IEEE 802.1x access control;
	512 ACL rules based on L2~L4 information; RADIUS/TACACS+ AAA;
	HTTPs & SSH v2; IP/MAC binding; IP source guard & ARP inspection
IP Multicasting	IGMP snooping v1/v2/v3, IGMP proxy reporting; MLD snooping v1/v2; IGMP fast leave;
	IGMP query; IGMP filtering/throttling; MVR (Multicast VLAN Registration)



Management	WebGUI/Telnet CLI interface; SNMP v1/v2c/v3; RMON I (1,2,3,9 groups) & RFC1213 MIB II;
	Private MIB; DHCP client/snooping/relay option 82;
	TFTP/HTTP based firmware and configuration upgrade; Port mirroring; RSPAN;
	Event syslog server; DNS client/proxy; NTP client; UPnP; IPv4/IPv6 management;
	SFF-8472 DDMI; IEEE 802.1ab LLDP
Power Input	AC power input (100~240V); -36 ~ -72 DC power input
Power Consumption	< 60W
Operating Temperature	0~50 °C
Storage Temperature	-25~70 °C
Humidity	5%~95% (non-condensing)
Dimension	440 × 220 × 43.5 mm (WxDxH)
Certification	CE, FCC class A

## // Application



## **//** Ordering Information

Model Name	Description
QSW-4416CM-AC	16 $\times$ 2.5G/1G RJ45 + 4 $\times$ 10G/1G SFP+ slots Managed Ethernet Switch with single AC power supply
QSW-4416CM-DC	16 $\times$ 2.5G/1G RJ45 + 4 $\times$ 10G/1G SFP+ slots Managed Ethernet Switch with single DC power supply
QSW-4416CM-AA	16 $\times$ 2.5G/1G RJ45 + 4 $\times$ 10G/1G SFP+ slots Managed Ethernet Switch with dual AC power supply
QSW-4416CM-DD	16 $\times$ 2.5G/1G RJ45 + 4 $\times$ 10G/1G SFP+ slots Managed Ethernet Switch with 2 $\times$ DC power supply
QSW-4416CM-AD	$16 \times 2.5$ G/1G RJ45 + $4 \times 10$ G/1G SFP+ slots Managed Ethernet Switch with AC + DC power supply