QSW-4416CM



16 × 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 multigligabit 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 multigligabit 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 6E/7 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.

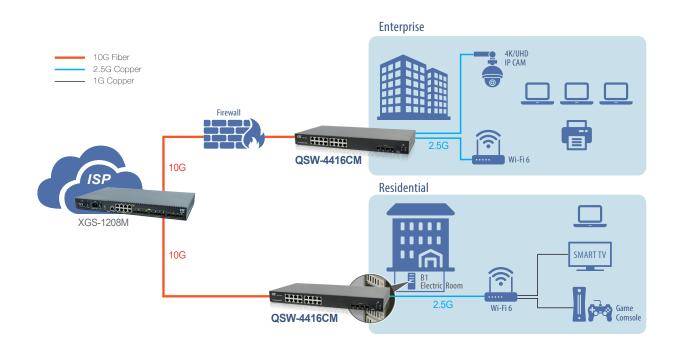
It is featured completely L2+ switch functionality which guarantees high network availability, robust network access and security as well as comprehensive QoS in the network edge. It will deliver the benefits of optimal traffic transportation performance and lower ownership cost while maintaining the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

Specifications	
Interface	Fiber port: 4x 1G/10G SFP+
	Copper port: 16x 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
	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)
	Static trunk (SA, DA, IP, TCP/UDP port), IEEE 802.1AX
	IEEE 802.3ad LACP, 10 LACP trunk groups Max; 8 port Max. per LACP trunk group
	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 query, IGMP filtering/throttling, MVR (Multicast VLAN Registration)

L2+ Managed 2.5G Ethernet Switch

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	100~240VAC; 36~60VDC
Power Consumption	TBD
Operating Temperature	0~50 °C
Storage Temperature	-25~70 ℃
Humidity	5%~95% (non-condensing)
Dimension	$440 \times 220 \times 43.5 \text{ mm (W}\times\text{D}\times\text{H)}$
Certification	CE, FCC class A

Application



Ordering Information

Model Name	Description
QSW-4416CM-AC	$16 \times 16/2.5$ G RJ45 + $4 \times 16/10$ G SFP+ Slots Managed Ethernet Switch with Single AC Power Supply
QSW-4416CM-DC	$16 \times 16/2.5$ G RJ45 + $4 \times 16/10$ G SFP+ Slots Managed Ethernet Switch with Single DC Power Supply
QSW-4416CM-AA	$16 \times 16/2.5$ G RJ45 + $4 \times 16/10$ G SFP+ Slots Managed Ethernet Switch with Dual AC Power Supply
QSW-4416CM-DD	$16 \times 16/2.5$ G RJ45 + $4 \times 16/10$ G SFP+ Slots Managed Ethernet Switch with Dual DC Power Supply
QSW-4416CM-AD	$16 \times 16/2.5$ G RJ45 + $4 \times 16/10$ G SFP+ Slots Managed Ethernet Switch with AC + DC Power Supply

Optional Accessory

■ 10G SFP+ Transceiver Module

Model Name	Description
SFM-1000-SR85	10G SFP+ SR/SW MMF 300m, 850nm VCSEL, 10G Ethernet/FC/SDH/S0NET
SFS-1010-LR31	10G SFP+ LR/LW SMF 10km, 1310nm DFB DML, 10G Ethernet/FC/SDH/SONET
SFS-1040-ER55	10G SFP+ ER/EW SMF 40km, 1550nm DFB EML, 10G Ethernet/FC/SDH/SONET
SFS-1080-ZR55	10G SFP+ ZR/EW SMF 80km, 1550nm DFB EML, 10G Ethernet/FC/SDH/SONET