



# QSW-4204M

1× GbE, RJ45 + 4× 1G/2.5G, RJ45 + 2× 1G/10G SFP+ L2+ Managed Ethernet Switch with Cable Tray option

The QSW-4204M is a next generation CPE switch developed by CTC Union Technologies. This new CPE switch is designed with 1 ports 10M/100M/1Gbps RJ45 and 4 ports 10M/100M/1G/2.5Gbps as well as 2 ports 1G/10Gbps SFP+ based fiber optics for P2P FTTH service applications. Its design concept is well considered from the basis of stylish and elegant appearance for the residential user as well as the advantage of easy installation for the FTTH service provider. Hence, the QSW-4204M makes an Internet connected device no longer like the legacy ones hidden in the corner of household. Oppositely, it can become as an eye-catching furniture to blend into the overall decoration aesthetics at home. As usual, the QSW-4204M adopts the evolutionary cable tray structural design to help the installer more easily and protectively manage the excess fiber within the unit.

The QSW-4204M leverages the technology strength of chipset provider which is the member of NBASE-T alliance to enable the multigigabit speed feature. The enterprise and residential users will be able to experience the reliable and secure Ethernet based high speed network access and also connect the existing Cat5e/Cat6 cabling infrastructure with IEEE 802.11ac wave 2 or even WiFi 6 device, NAS access as well as small cell or powerful workstations to break through the limitation of 1Gbps data rate for content richer applications such as Cloud storage, 4K video streaming or HD/UHD teleconferencing.

The QSW-4204M fully supports Layer 2 feature sets with complete network management interfaces such as Web GUI, CLI and SNMP. The QSW-4204M also supports DHCP auto provisioning and TR-069 client function which are suitable for the very large scale deployment from operator or service provider. Both device management features can avoid truck rolls and save OPEX for FTTH service providers.

#### **Feature**

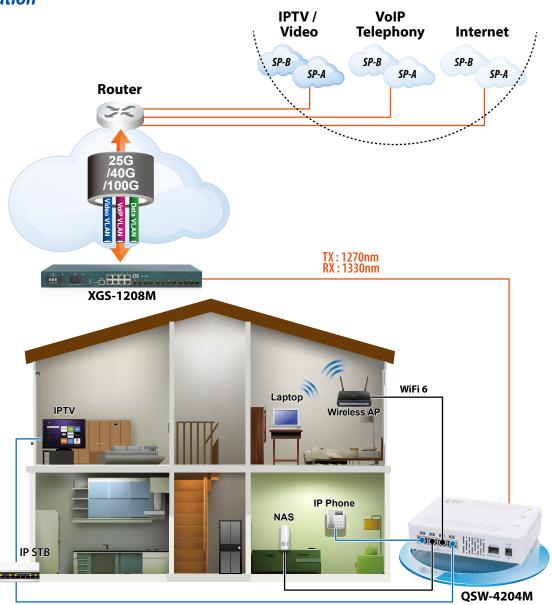
- Smart interrogator function automatically gather vital information from the CPE at all times and store in database accessible by the operator
- Smart fiber tray design makes fiber cable management more handy

#### **Specifications**

Interface	fiber port: 1G/10Gbps SFP+ ×2 Copper port: 10M/100M/1G/2.5Gbps RJ45 ×4; 10/100/1000Mbps RJ45 for telemetry ×1
Switching Fabric Capacity	62Gbps
Packet forwarding rate	14880pps       @10Mbps         148800pps       @100Mbps         1488000pps       @1000Mbps         3720000pps       @2500Mbps
Transmission Method	Store and Forward Switching
Packet buffer	8M bits
MAC table size	16K
Jumbo frame size	10240 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, 3 LACP trunk groups Max, 8 port Max. per LACP trunk
L2 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 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

Security	256 ACL rules based on L2~L4 information RADIUS/TACACS+ authentication 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 TR-069 client for remotely device management and configuration RMON I (1,2,3,9 groups) & RFC1213 MIB II Dying gasp in trap message DHCP client/relay/snooping/relay option 82 TFTP/HTTP based firmware and configuration upgrade Port mirroring Event syslog server Smart detect functionality for configurable log and trap warning option DNS client/proxy DHCP auto provisioning (option 55/60/66/67/132/240/254) NTP client UPnP IPv4/IPv6 management SFF-8472 DDMI IEEE 802.1ab LLDP
Power Input	12V/2A AC power adaptor
Operating Temperature	0~50°C
Storage Temperature	-25~70°C
Humidity	5%~90% (non-condensing)
Dimension	162 × 122 × 43.5mm (W×D×H)
Certification	CE, FCC, class A

## **Application**



#### **Ordering Information**

Model Name	Description
QSW-4204M	1-port GbE, RJ45 and 4-ports 1G/2.5G, RJ45 to 2-slots 1G/10G SFP+ L2+ managed Ethernet Switch

## **Optional Accessory**

Model Name	Description
GSW-20FT	Fiber Tray set for GSW-20 series cpe