





# GSW-2020P

### 4× GbE/RJ45 + 1× GbE/RJ45 with PoE+/PSE L2+ Managed Ethernet Switch with Cable Tray (option)

The GSW-2020P is a new generation CPE switch developed by CTC Union Technologies. This new CPE switch is designed with 4 ports 10/100/1000Base-T RJ45, plus 1 port 10/100/1000Bse-T RJ45 with PoE<sup>+</sup>/PSE for Air2Fiber service application. 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 service provider. Hence, the GSW-2020P 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 GSW-2020P adopts the evolutionary cable tray structural design to help the installer more easily and protectively manage the excess cable within the unit.

The GSW-2020P fully supports Layer 2 feature sets with completely network management interfaces such as Web GUI, CLI and SNMP. The GSW-2020P 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 service providers.

#### **Feature**

- Built-in IPTV probe feature can monitor IPTV service quality and performance in real-time
- Smart interrogator function automatically gather vital information from the CPE at all times and store in database accessible by the operator
- Smart cable tray design makes cable management more handy
- Built-in one PoE<sup>+</sup>/PSE port for feeding PoE/PD active or PoE/PD passive equipment application
- Regulated PoE output voltage (52VDC) to stabilize PoE device, and guarantee delivery PoE power distance to 100 meter
- Cable diagnostics, measuring cable OK or broken point distance

#### **Specifications**

PoE Standard   IEEE 802.3af & IEEE 802.3at   SORP Pot Power Budget   Sorp Power	Interface		ort: 10/100			(0	QoS feature	Hard wired IEEE 802.1p 8 priority queues per port
PoE Power Budget 30/W  Pin Assignment    Standard PoE AF/IT   Passive PoE 15.4W/30W   ID. DSCP, TCP/UDP port   ID. DSCP,	PoE Standard	PoE+/PSE port: 10/100/1000Mbps RJ45 × 1 (Port 5)						CoS based traffic classification on switch port VLAN
Pin Assignment			Jai & ILLL O	UZ.Jal				ID, DSCP, TCP/UDP port
Pin		Standard PoE AF/AT						Per Port/Queue based ingress/egress rate limit in
Security   Static port security (MAC based)			Alternative A mode	Alternative	Alternative A mode	Alternative		IEEE 802.3x flow control
Security   Static port security (MAC based)   Per port limited MAC learning   Per post limited MAC learning   Per posted/MAC base/single/multiple IEEE 802.1x   access control   128 ACL rules based on L2~L4 information   RADIUS/TACACS+ authentication   128 ACL rules based on L2~L4 information   RADIUS/TACACS+ authentication   RADIUS/TACACS+ authentication   Per post limited MAC learning   Per post lius discounting   Per post liable Maclearning   Per post liable MAC learning   Per post liable M			1					flooding control
A							Security	
Fort based/MAC base/Single/multiple liEE 802.1X access control 128 ACL rules based on L2~L4 information RADIUS/TACACS+ authentication  Packet forwarding 14880pps @100Mbps		-	V-	\/_	V-	\/ <b>_</b>	•	Per port limited MAC learning
Comparison   Com								
Packet forwarding rate 14880pps 14880pps 2100Mbps 210Mbps 210			V-	* 1	V-	* 1		
Packet forwarding rate		7		V-		V-		
Packet forwarding rate 14880pps   4880pps   4880pps   4880pps   4880pps   4880pps   4880pps   4880pps   4880pps   4880pps   48800pps   488000pps   4880000pps   488000pps   4880000pps   488000pps   488000pps   488000pps   4880000pps   4880000pps		8		V-		V-	Security	
Transmission Method Store and Forward Switching MAC table size MAC table size Jumbo frame size VLAN feature    IEEE 802.1Q tagged VLAN (4K VLAN groups)   IEEE 802.1ad QinQ VLAN   Voice VLAN; MAC based VLAN; Protocol based VLAN   Private VLAN for port isolation, VLAN Translation GVRP (GARP VLAN registration protocol)  Link aggregation   Link aggregation   Link aggregation   Static trunk (SA, DA, IP, TCP/UDP port)   IEEE 802.1D STP/IEEE 802.1w RSTP/IEEE 802.1s MSTP Loop Protection   IEEE 802.1D STP/IEEE 802.1w RSTP/IEEE 802.1s MSTP Loop Protection    PMulticasting   MLD snooping v1/v2   IGMP fast leave   IGMP query   IGMP filtering/throttling   MVR (Multicast VLAN Registration)   IPTV probe functionality    Management   WebGUI/Telnet CLI interface   SNMP v1/v2c/v3   TR-069 client for remote 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 upgrad   Port mirroring   Event syslog server   DNS client/proxy   DHCP auto provisioning   NTP client, UPnP   IPv4/IPV6 management   IEEE 802.1ab LLDP   IEEE 802.1ab L						<u>.                                    </u>		
Method  Store and Forward Switching  Packet buffer  1.75M bits  MAC table size  4K  Jumbo frame size  VLAN feature  IEEE 802.1Q tagged VLAN (4K VLAN groups) IEEE 802.1ad QinQ VLAN Voice VLAN; MAC 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, 2 LACP trunk  L2 switching Protection  Store and Forward Switching IGMP query IGMP query IGMP filtering/throttling MVR (Multicast VLAN Registration) IPTV probe functionality  WebGUI/Telnet CLI interface SNMP v1/v2c/v3 TR-069 client for remote device management and configuration 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 upgrad Port mirroring Event syslog server DNS client/proxy DHCP auto provisioning NTP client, UPPP IPv4/IPv6 management IEEE 802.1ab LLDP						IP Multicasting	MLD snooping v1/v2 IGMP fast leave	
MAC table size 4K  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   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, 2 LACP trunk groups Max   5 port Max. per LACP trunk   IEEE 802.1s MSTP   Loop Protection   IEEE 802.1ab LLDP  Management   MVR (Multicast VLAN Registration)   IPTV probe functionality   Management   WebGUI/Telnet CLI interface   SNMP v1/v2c/v3   TR-069 client for remote 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 upgraded   Port mirroring   Event syslog server   DNS client/proxy   DHCP auto provisioning   TPP client, UPnP   IPP4/IPv6 management   IEEE 802.1ab LLDP   IEEE 802.		Store and Forward Switching						
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VLAN feature    IEEE 802.1Q tagged VLAN (4K VLAN groups)   SNMP V1/V2C/V3     IEEE 802.1ad QinQ VLAN   TR-069 client for remote device management and voice VLAN; MAC based VLAN   Private VLAN for port isolation, VLAN Translation   GVRP (GARP VLAN registration protocol)   TFTP/HTTP based firmware and configuration upgrad   Port mirroring     Link aggregation   Static trunk (SA, DA, IP, TCP/UDP port)   IEEE 802.3ad LACP, 2 LACP trunk groups Max   5 port Max. per LACP trunk     L2 switching   IEEE 802.1D STP/IEEE 802.1w RSTP/IEEE 802.1s MSTP   Loop Protection   TP Client, UPnP     IPV4/IPV6 management   IEEE 802.1ab LLDP	Jumbo frame size	10240 By	tes				Management	,
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L2 switching protection  IEEE 802.1D STP/IEEE 802.1w RSTP/IEEE 802.1s MSTP Loop Protection  NTP client, UPnP IPv4/IPv6 management IEEE 802.1ab LLDP	Link aggregation				ЭХ			
				802.1w RST	P/IEEE 802.	1s MSTP	STP DHCP auto provisionin NTP client, UPnP IPv4/IPv6 managemen IEEE 802.1ab LLDP	DHCP auto provisioning NTP client, UPnP IPv4/IPv6 management

Timing synchronization	IEEE 1588v2 (port1~4)				
Power Input	Connector	DC power Jack			
	Input voltage	52 VDC			
	Accessory	power adaptor 100~240VAC input 52VDC output			
Operating Temperature	0~45°C				

Storage Temperature	-25~70°C
Humidity	5%~90% (non-condensing)
Dimension	162 × 122 × 32.2mm (W×D×H)
Certification	CE, FCC, RoHS

## **Fixed Wireless Internet Application**



## **Ordering Information**

Model Name	Description
GSW-2020P	$4\times$ GbE, RJ45 + $1\times$ GbE, RJ45 with PoE+/PSE Managed Ethernet Switch

## **Optional Accessory**

Model Name	Description
GSW-20FT	Cable Tray set for GSW-20 series CPE