GX3900 GEPON OLT

GX3900 is EPON series GEPON OLT equipment with card plugging design. It provides 144 GEPON optical ports and connects 9216 remote ONUs at most. It provides GE optical/electrical and 10GE optical uplink ports. GX3900 with rack design is convenient and flexile for extending and upgrading service. GX3900 can be applied to access solutions of FTTB/FTTP/ FTTH.

Features

Technical specifications			
Slot number	19	Service module number	Up to 12, each module provides 4/8/12 EPON interface
Main control module number	2 (support 1+1 backup)	Uplink module number	Uplink module and service module can be mixed inserted,uplink module can be configured according to requirement
Fan module number	3	Power supply module number	2 (support 1+1 backup)
PON interface	Standard: IEEE 802.3ah 1000BASE-PX20+-D Average launch power: 2.5dBm ~+7 dBm Wavelength: 1310/1490nm Receiver sensitivity: ≤-30dBm Saturation receive power : ≥-6dBm		
GE electrical interface	Support IEEE 802.3 10/100/1000BASE-TX Transmission rate: 10/100/1000Mbit/s auto-sensing Interface type: RJ45 MDI/MDIX: auto-sensing Working mode: full duplex/half duplex auto-sensing		
GE optical interface	Support IEEE 802.3 1000BASE-LX/SX/CX Transmission rate: 1000Mbit/s Interface type: LC/dual LC		
10GE optical interface	Support IEEE 802.3ae-2002 Transmission rate: 10Gbps Interface type: LC/dual LC		
Ethernet network management (In-band)	Dispense with specific interface, any service interface can be local Ethernet network management interface		
Ethernet network management (out-of-band)	Transmission rate: 10/100Mbit/s auto-sensing Interface type: RJ45 Working mode: full duplex/half duplex, auto-sensing MDI/MDIX: auto-sensing		
Console interface	Physical interface:RJ45 Protocol:RS232 Baud rate:9600		

System features			
Data rate	Uplink/downlink 1.25Gbps	MAC address	32k~512k
Transmission distance	30km (1:32 split ratio)	Split ratio	1:64
PON interface	Up to 144	ONU number	Up to 9216
Switch capacity	176Gbps	Backplane bus bandwidth	352Gbps
VLAN	Support 4k VLAN Support VLAN based on MAC address, protocol and IP subnet Support IEEE 802.1ad(Q in Q or VLAN stack) Support VLAN transition Support flexible Q in Q, to Support tag-based VLAN ACL policy to add, replace and delete Support add, replace and delete VLAN tags of ingress and egress Support multicast VLAN Support 8k ingress and 8k egress VLAN/dual VLAN tag policy	Bridge	Support MAC address learn based on hardware, variety of MAC address learning management Support MAC limit based on port,link aggregation and VLAN Support the largest 12KB of Jumbo packets Support IEEE 802.1d(STP)/802.1w(RSTP)/802.1s(MSTP) Support broadcasting storm control Support port mirroring, ingress and egress can be mirrored at the same time
Flow control	Support IEEE 802.3x(full duplex flow control) and back pressure flow control (half duplex)	DBA	Bandwidth increment is 64kbit/s Support fixed bandwidth/guaranteed bandwidth/maximal bandwidth, delay priority and etc SLA parameter
Multicast	Support SCB (Single Copy Broadcast) Support IGMP V1/V2 Support IGMP Snooping and IGMP Proxy Support 1000 groups Support multicast source port control Support multicast authority control Support the joining and fast-leave of IGMP members Support static multicast	Link aggregation	Suport IEEE 802.3ad(Link aggregation) Support 128 port aggregation groups, each group support 8 members Support traffic equilibrium based on layer-2 or layer-3 Support traffic equilibrium based on MAC, VLAN, Ethernet type, destination IP address, TCP/UDP port

System features			
QoS	Support IEEE802.1p and DSCP, each port provides 8 priority queue Support priority tag add, modify and delete based on ACL policy Support queue scheduling based on SP, WRR and WDRR Support rate-limiting of service traffic based on ACL policy Support traffic shaping	ACL	Support ACL policy based on port, MAC, IP, TCP/UDP port number and ToS/Diffserv Support service sense Support deep packet inspection, can be resolved before any 128-byte packet Support up to 840bit width of the characters match Support 8k~256k items ACL policy Support VLAN and dual VLAN tag add, delete and modify based on ACL policy
Security	Support AES/triple churning encrypt of PON link Support dynamic update of key Support broadcasting storm control, rete-limiting of broadcasting , unknown unicast or multicast based on message or byte Support message filter and rate- limiting of ACL policy Anti-DOS attack based on hardware, including Land attack, ping flood, SYN-ACK flooding, smurf attack	Reliability	Support main control module hot backup Support uplink port cross module protection Support 50ms-level fast ring protection Support PON port cross module protection Support 50ms-leve 1+1 trunk optical protection Support 50ms-leve optical whole protection Support power supply hot backup
Management	Support UniView DA NM platform based on SNMP V1/V2c Support Telnet management and local CONSOLE management Support in-band and out-of- band NM, and the management data configuration of VLAN and priority Patent SNMP over OAM technology to centralized manage all ONUs	Maintenance	Support alarm and capability statistic, flow inspection, loop-back test, remote power-fail inspection Support ONU automatic configuration, volume configuration Support long-distance on line upgrade of timing automatism and batch. Support remote line inspection, such as short circuit, incomplete circuit, and the location of failure Support short-message alarm Support optical power detection of PON link, on-line monitor OLT launch/receive optical power

Physical specifications			
Dimension(mm) (W*D*H)	442×420×575(13U))	Power supply	Sup p or t AC 220V a nd D C - 48V hybrid power, support 1+1 backup
Weight	<50kg	Power consumption	<800W
Environment	Working temperature:0℃～45℃ Storage temperature:-10℃～70℃ Humidity: 10%～90% (non-condensing)		