20G + 4 G/SFP Combo Stackable L3 SNMP Switch

LevelOne's GSW-2495 is a stackable Layer 3 switch that provides the feature-rich and high-performance solutions for enterprise networking applications. This switch can integrate different network scales by offering variety network interfaces, 24 copper Gigabit ports and 4 combo SFP ports, to provide outstanding flexibility for interoperating with your copper or fiber network.

Routing/Switching Capability --This switch provides non-blocking routing as well as wire-speed switching for IP network use. The L3 switching capability allows you to enhance performance and provides traffic control and data security by offering multiple features such as OSPF routing, IP multicast routing, IP unicast using static routes, RIP/RIPv2 and CIDR.

Advanced stacking increasing scalability -- Our advanced closed loop stacking architecture allows you to connect up to 8 units of GSW-2495 thus providing a single manageable environment and increasing expansion scalability for future enlargement as your business grows. This stacking feature also protects your network stability with resilient links. Should one of stacked units goes down, the other units in the same stack can still keep running.

Versatile Features for Management-- The GSW-2495 supports a versatile of network management features including: Console, CLI, Telnet, Web, SNMP v1/v2c/v3, RMON, TFTP, Port Mirroring and DHCP as well as advanced traffic management options including: 802.1x, bandwidth control and support for IGMP v1/v2 Snooping. In order to increase network reliability, the switch also supports spanning tree protocol for standard bridging. In addition this unit provides six trunk groups of eight member ports eliminate network bottlenecks from increased bandwidth. You can partition the network into 256 active VLANs using 802.1Q Tagging technology. The Class of Service (CoS) allows you to prioritise traffic for time-sensitive applications. Moreover, the GSW-2495 also provides a redundant power supply inlet in the rear panel to ensure a reliable system.

Multiple Security Mechanism-- In order to protect your network from unauthorized access, this device provides mulitple security mechanisms such as port security, SSL for web management encryption, RADIUS and TACACS+ clients for user authentication and SSH protocol for secure shell interface.
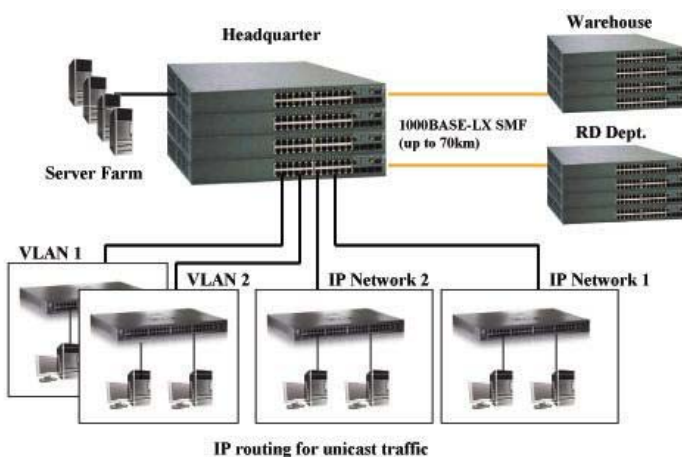

GSW-2495

Key Features

- ▪ **Multiple Interface**
  - 20-Port Gigabit ports with 4 combo G/SFP ports
  - Stacking up to 8 units
- ▪ **L3 Routing and L2 Switching capabilities**
  - Advanced closed stacking architecture
  - RIPv1/v2, OSPF
  - PIM-DM/SM, DVMFP, VRRP
  - Spanning Tree Protocols: 802.1d/w/s
- ▪ **Advanced Network Management Features**
  - SNMPv1/v2c/v3, RMON (1,2,3,9 Group), MIB
  - CLI, Web interface, Telnet

- ▪ **Security Mechanism**
  - Port security
  - SSL/HTTP
  - SSH/Secure Shell
  - RADIUS/ TACACS+ Client
- ▪ **Other Features**
  - VLAN
  - QoS
  - Optional redundant power supply unit

Technical Specification

- **Standards Compliance**
  IEEE 802.3/ IEEE 802.3u
  IEEE 802.3ab Gigabit 1000T
  IEEE 802.3z Gigabit Fiber
  IEEE 802.3x Flow Control and Back Pressure

- **Physical Ports**
  24 x RJ-45 Gigabit ports
  4 x Gigabit combo SFP ports
  1 x RS 232 console port
  1 x RJ-45 management port
  1 x Redundant Power connector

- **Switch Fabric**
  160Gbps

- **MAC Address Table**
  16K entries with Auto learning function

- **Memory**
  Packet Buffer: 2MBytes,
  Flash Memory: 32MBytes
  SDRAM: 128MBytes

- **Spanning Tree Algorithm**
  IEEE 802.1D Spanning Tree Protocol
  IEEE 802.1 w Rapid Reconfiguration Spanning Tree
  IEEE 802.1 s Multiple Spanning Tree (max 32 instance)

- **VLAN**
  Port-based VLAN/802.1Q Tagged VLAN/ 802.1v protocol-based VLAN classification
  Up to 256 active VLAN in one switch out of 4K VLAN ID
  Supports 802.3ac frame extension for VLAN tagging
  Supports GVRP for dynamic VLAN management
  Private VLAN

- **Trunking**
  Standalone configuration
  - Up to 6 trunk links
  - Up to 8 ports per trunk link
  Stacking configuration (for 8 units)
  - Up to 12 trunk links
  - Up to 2 gigabit ports per trunk link

- **Supports unicast/multicast traffic balance over trunk ports**
  Traffic balancing for unicast traffic is based on src/dest. MAC Addr.
  Traffic balancing for multicast traffic is based on dest. MAC Addr

- **Other L2 Switching Features**
  All 10/100/1000Base-TX ports support auto-sensing, auto-negotiation
  Supports Flow control
  - IEEE802.1x for full duplex mode
  - Back-Pressure flow control in half duplex mode
  Supports Jumbo Frame up to 9KB
  Provides 802.3ad Link Aggregation and LACP
  Cisco Ethernet Channel compatible
  Supports IGMP snooping
  Provides HOL (Head of Line) blocking prevention
  Provides Broadcast storm protection

- **Routing Protocols (L3 Features)**
  Provides up to 4K IP address entries
  Static IP routes (128 entries)
  RIP I (RFC1085) and RIP II(RFC2453)
  OSPF (RFC2328) routing
  IP Multicast Routing: DVMRP, PIM-DM/SM
  IP Redundancy: VRRP(RFC2338)
  Supports Supernetting (CIDR)
  Provides multi-netting
  Provides DHCP/BOOTP (RFC 951) relay
  Provides DHCP server (RFC 2131) Client
  ARP(RFC826), DNX support server(proxy)

- **Security**
  User/Password protected system management terminal
  L2/L3/L4 access control list
  Radius Client
  Secure Shell (SSH/ Secure Telnet)
  HTTPS/SSL
  IEEE 802.11x

- **QoS**
  Supports IEEE 802.1p/DSCP based CoS
  Supports 8 priority queues per port,
  Schedule Schemes: Weighted Round Robin/First
  Strict scheduling priority queue
  IP TOS/Precedence based CoS
  Bandwidth Management: Both for Ingress and Egress
  DiffServ

- **Management**
  CLI, Web-based, Telnet management
  Supports software upgrade/download via XMODEM TFTP
  Supports port mirroring
  Supports BOOTP/DHCP client for IP address assignment
  Supports ARP Proxy
  Supports Remote Ping
  Supports Dual copies of code, multiple copies of configuration
  Supports System/Crash/Error log
  Supports SNTP (RFC2030)
  Supports SNMP v1/v2c/v3
  Supports RFC 2819 RMON group (1,2,3,9)
  Supports MIBs

- **LEDs**
  Per Device: Power
  Per 10/100Base-TX: Link/Activity, Full duplex/Collision
  Per 1000Base-T: 100, 1000, Link/Activity, Full duplex/Collision

- **Physical Spec**
  Dimension: 442mm(W) * 410mm(D) * 44mm(H)
  Internal power supply: 100~240VAC, 50/60Hz
  Power Consumption:15 Watts (max)
  Operating Temperature: 0° C ~50° C (32° F ~ 113° F)
  Operating Humidity: 5% ~ 90% (Non-condensing)

- **EMI and Safety**
  FCC Class A, CE

Product Diagram

IP routing for unicast traffic

Ordering Information

- GSW-2495:   20G + 4 G/SFP Combo Stackable L3 SNMP Switch
- L3R1000:   Redundant Power Unit
- L3C0030:   Stacking Cable (30cm)
- L3C0130:   Stacking Cable (130cm)
- GVT-0300:   SFP Transceiver fits mini GBIC (550m)
- GVT-0301:   SFP Transceiver fits mini GBIC (10km)
- GVT-0302:   SFP Transceiver fits mini GBIC (70km)