

XEL-1291 12-Port L3 Managed 10-Gigabit Switch, 8 x 1G/2.5G/5G/10G RJ45, 4 x 1G/2.5G/10G SFP+ Uplinks, 240Gbps Non-Blocking Fabric, 19-Inch Rackmount

Product Images





Short Description

- **Multi-Gig 10G Connectivity:** 8 x 100M/1G/2.5G/5G/10G RJ45 ports and 4 x 1G/2.5G/10G SFP+ uplinks for flexible copper and fiber designs
- **High-Performance Fabric:** 240Gbps non-blocking switching capacity and 178.56Mpps forwarding for wire-speed throughput on every port
- **Advanced L3 Routing:** Static IPv4/IPv6 routes, RIP v1/v2, OSPF v2 and BGP-4 for scalable inter-VLAN and WAN routing
- **Rich VLAN Segmentation:** Supports up to 4K 802.1Q VLANs with QinQ, private, voice, guest and subnet-based VLAN options
- **Strong Security:** 802.1X authentication, ACLs, MAC/port limiting and DoS protection to block unauthorized access and attacks
- **Service-Aware QoS:** Eight hardware queues per port with SP, WRR and WDRR scheduling to prioritize voice, video and critical services
- **Resilient Architecture:** LACP/static trunks, MSTP (64 instances) and ERPS rings for load sharing and sub-second failover
- **Comprehensive Management:** Web GUI, console/Telnet/SSH, HTTPS/SSL, SNMP v1/v2c/v3, Syslog and FTP/TFTP for easy deployment and monitoring
- **Rack-Ready Design:** 19-inch rack-mount L3 10G switch ideal for SMB cores, campus edge and high-performance workgroups

Description

The LevelOne XEL-1291 is a high-performance Layer 3 managed 10G Ethernet switch designed for SMB cores, campus edge and high-demand workgroups. It integrates eight 100M/1G/2.5G/5G/10G adaptive RJ45 ports with four 1G/2.5G/10G SFP+ uplinks, delivering flexible copper and fiber connectivity for servers, NAS, access switches and wireless infrastructure in a standard 19-inch rack-mount form factor.

Featuring a non-blocking switching fabric of 240 Gbps and forwarding performance up to 178.56 Mpps, the XEL-1291 provides true wire-speed throughput on every port, even under heavy mixed traffic and jumbo-frame workloads. This makes it ideal for bandwidth-intensive applications such as virtualization, high-speed backup, multimedia

production and large file transfers.

The switch delivers full Layer 3 functionality with support for IPv4/IPv6 static routes, RIP v1/v2, OSPF v2 and BGP-4, enabling dynamic and scalable routing between VLANs and upstream networks. Up to 4K IEEE 802.1Q VLANs with QinQ, private, voice, guest and subnet-based options allow precise traffic segmentation for multi-tenant and departmental deployments. IGMP v1/v2/v3 snooping ensures efficient handling of multicast streams such as IPTV and video conferencing.

Enterprise-grade security features include 802.1X port-based authentication, MAC and port limiting, Access Control Lists (ACLs) and DoS protection, helping to prevent unauthorized access and mitigate attacks at the network edge. Eight hardware queues per port with SP, WRR and WDRR scheduling provide service-aware QoS, ensuring that latency-sensitive voice, video and business-critical data receive appropriate priority and guaranteed bandwidth.

For resilience and high availability, the XEL-1291 supports LACP/static link aggregation, MSTP (up to 64 instances) and ERPS ring protection, combining load-balanced bandwidth with sub-second failover. A comprehensive management toolkit—including Web GUI, console/Telnet/SSH CLI, HTTPS/SSL, SNMP v1/v2c/v3, Syslog and FTP/TFTP—simplifies deployment, monitoring, firmware upgrades and ongoing configuration, making the XEL-1291 an efficient and cost-effective 10G upgrade path for modern SMB and edge networks.

Additional Information

Customs product code (TARIC).	8517620000
Features.	<p>L3 Features : • Static Route (IPv4/IPv6) • Route Aggregation • DHCPv4 Server • DHCPv6 Server • RIPv1/v2/RIPng • OSPF v2/v3 • BGP4/BGP6 • VRRP (IPv4/IPv6) • PIM (IPv4/IPv6) • Virtual stacking</p> <p>L2 Features : 1. MAC Address Table • MAC Aging Time • MAC Filter • MAC Notification 2. Basic Management • Console/Telnet/SSH • Http/Https • SSL/TLS • FTP/TFTP • Syslog • SNMP(v1/v2c/v3) • SNMP Trap • RMON • SNTp/NTP • CPU protect • Software/Hardware watchdog • Firmware Upgrade/Backup • Ping/Traceroute • Onvif • ZTP 3. Port Config • Bandwidth Control • Flow Control • EEE • MTU • CFM(802.1ag) • EFM OAM(802.3ah) • DDM • Storm Control • Port Isolation • Port Security • Virtual Cable Test • ULDP/Cisco UDLD 4. Discovery • LLDP(802.1ab) • LLDP-MED 5. Link Aggregation • Static • LACP(802.3ad) • Load Balance(src-mac/dst-mac/src-ip/dst-ip) • Max groups and ports per group 6. VLAN • VLAN(802.1Q 4K) • Access/Trunk/Hybrid • Private VLAN • VLAN Filter • MAC-based VLAN • Protocol-based VLAN • IP Subnet-based VLAN • Voice VLAN • GVRP/GMRP • QinQ/Selective-QinQ/Flexible QinQ • VLAN Translation/N:1 VLAN Translation • Guest VLAN 7. Network Loop Detection • Loopback Detection • ERPS 8. Spanning Tree • STP/RSTP/MSTP • MSTP Support 64 instance • BPDU Guard/Root Guard/BPDU Tunnel 9. ARP • Static ARP • ARP Scanning Prevention • ARP Spoofing Prevention • ARP Guard • Gratuitous ARP • Dynamic ARP Inspection • ARP Quantity Control IPv4 Related Function : 1. ICMP • Anti ICMP Attack • ICMP Rate Limit • ICMP Unreachable Drop 2. Control Multicast • DCSCM 3. Multicast VLAN • Multicast VLAN 4. IGMP • IGMP SNOOPING v1/v2/v3 • Fast Leave • IGMP Proxy 5. DHCP • DHCP Client/BOOTP • DHCP Relay • DHCP Snooping • DHCP Option 82/43/60/61/67 IPv6 Related Function : 1. IPv6 Basic • IPv6 ND Snooping 2. DHCPv6 • DHCPv6 Relay • DHCPv6 Snooping • IPv6 SAVI • Security RAW 3. IPv6 Multicast Routing • MLD v1/v2 Snooping 4. IPv6 Features • SNMP over IPv6 Support • HTTP over IPv6 Support • SSH over IPv6 Support • DNS over IPv6 Support • IPv6 ping/traceroute Support • IPv6 Telnet Support • IPv6 Radius+ Support • IPv6 Tacacs+ Support • IPv6 SNTp/NTP Support • IPv6 FTP/TFTP Support • IPv6 IPsec Support • IPv6 ACL QoS(Quality Of Service) : 1. Basic • Trust COS/DSCP • Trust Port 2. Scheduling • SP • WRR • WDRR 3. PolicyMap Stream • Based on VLAN • Based on COS/DSCP • Aggregate PolicyMap • Ingress PolicyMap 4. Policing • CAR Stream Shaping(leak algorithm) • Ingress Policing 5. Rewrite • COS/802.1p Priority • IP Precedence • IPv4 DSCP/IPv6 DSCP • drop-precedence • internal-priority • Ingress/Egress Rewrite 6. Queuing • DSCP to DSCP mapping • DSCP to DP mapping • DSCP to Queue mapping • COS to DP mapping • COS to Queue mapping ACL : 1. IP-ACL • SIP/DIP • IP Protocol • IP Priority(DSCP,TOS, Precedence) • TCP,UDP src,dst Port 2. MAC-ACL • SRC/DST MAC • VLAN • COS • Tag/Untag 3. IP-MAC ACL • MAC-ACL and IP-ACL 4. User-defined ACL • Base on user defined profile 5. ACL Features • Based on time period ACL • ACL on VLAN • Based on ACL Stream</p>
Security.	<p>Security 1. 802.1x • Port Based Authentication • Support EAPoR • MAC based Authentication • Guest VLAN 2. MAB • Based on Port Authentication • Based on MAC Authentication 3. MAC Address Count Limit • Based on Port • Based on VLAN 4. IP Address Count Limit • Based on Port • Based on VLAN 5. Access Management • Based on source mac and IP address 6. Deny DoS Attack • TCP Flag • TCP Fragment • IP Segment • ICMP 7. TACACS+ • Standard Support 8. Radius • Standard Support • Client, Support MD5 9. SSL • Openssl 1.1.0</p>
Grade.	Commercial
PoE Supported.	No
Manageable.	Yes
Fanless.	No
Concurrent ports.	Total 12.00
Switching capacity.	240 Gbps
Approval and Compliance.	● FCC Part 15 Subpart B, Class A ● CE ● UKCA ● EN 62368-1 ● EN 55032 ● EN 55035 ● EN 61000-3-3 ● RoHS
Operating humidity.	10% RH ~ 90% RH
Operating temperature.	0°C ~ 50°C
Storage humidity.	5% RH ~ 90% RH
Storage temperature.	-40°C ~ 70°C
Package Contents.	● XEL-1291 ● Power Cord ● DB9 to RJ45 Console Cable ● 19" Rack Mount Kit ● Rubber Feet ● Quick Installation Guide ● Declaration of Conformity
Color.	Black
Model Number.	XEL-1291
Product weight (kg).	2.5
Dimensions (W x D x H).	440 x 207 x 44 mm
Power supply.	100-240 VAC, 50/60Hz, 2A Max
Data Rate.	10Gbps
Standards.	IEEE 802.3 10-BASE-T, Ethernet, IEEE 802.3u 100-BASE-TX, Fast Ethernet, IEEE 802.3ab 1000BASE-T, Gigabit Ethernet, IEEE 802.3x Full-duplex Flow Control, IEEE 802.3az Energy-Efficient Ethernet, IEEE 802.3ae changeable (10GBASE-SR/LR/ER), IEEE 802.1p Quality of Service (QoS), IEEE 802.1Q Virtual LANs (VLANs), IEEE 802.1D Spanning Tree Protocol (STP), IEEE 802.1w Rapid Spanning Tree Protocol (RSTP), IEEE 802.1s Multiple Rapid Spanning Tree Protocol (MSTP), IEEE 802.3ah Ethernet Link OAM, IEEE 802.3ad Link Aggregation Control Protocol (LACP), IEEE802.3z 1000Base-SX/LX, IEEE 802.3bz 2.5 Gigabit Ethernet
Power supply included.	Yes
Power consumption.	• DC full load: 43.21W • AC full load: 48.2W
MTBF.	100,000 hours
Packet forwarding rate.	178.56 Mpps
Mount.	19" rack mount, Desk mount
Jumbo frame (KB).	12
Packet buffer.	16 Mbit

