



## LY6

### A Powerful Spine/Leaf Switch for Datacenter and Cloud Computing

#### Product Highlight

- Optimized for IaaS datacenter, HPC and financial sectors requiring high performance, high bandwidth, low power and ultra low latency
- Up to 32 40GbE QSFP+ ports for high port density demand in modern datacenters
- Supports Network Automation
- Supports Network virtualization
- Software Defined Network support by OpenFlow and Open API
- Supports ONIE Installer

#### Overview

The XENYA LY6 is a high performance and low latency layer 2/3/4 Ethernet switch with 32 40GbE QSFP+ ports in a 1U form factor. Built for Infrastructure-as-a-service (IaaS) datacenter deployment, high performance computing clusters, and financial applications, the very high port density and high performance as well as ultra low latency characteristic makes XENYA LY6 ideal for the workloads and provides the best TCO.

#### Automation

Accompanied by the application of cloud computing, big data and parallel calculation, datacenter network devices continue to grow fast and make network automation a critical factor. Supporting auto installation and integration with orchestration tools like Chef and Puppet, XENYA LY6 helps for easy deployment of mass datacenter IaaS build-up.

#### Virtualization

Network virtualization is becoming an important topic for datacenters. XENYA LY6 provides hardware-based VXLAN feature to support virtual machine mobility. Not limited by 4K VLANs, VXLAN helps for the network scaling out across L3 subnets and can support up to 16.7M possible virtual networks.

#### SDN

Software Defined Network has emerged as a new approach to support open, vendor-agnostic, and programmable networks. XENYA LY6 provides OpenFlow and Open API with Python script support as SDN solution to fulfill the modern datacenter trend.

#### High Availability

The XENYA LY6 is designed for high availability from both hardware and software perspectives. The key features include:

- 1+1 hot-swappable power supplies
- 2+1 hot-swappable fans
- Out-of-band management support
- Multi-chassis LAG for preventing the risks of single point failure
- Up to 32 paths ECMP routing for load balancing and redundancy

### Physical ports

- 32 10/40GbE QSFP+ ports
- 1 RJ-45 out-of-band management port (10/100/1000)
- 1 RJ-45 console port
- 1 USB 2.0 port

### Performance

- Switching capacity: 2.56Tbps
- Forwarding rate: 1920Mpps
- Memory: 2GB with ECC
- CPU: Freescale P2020
- Storage: 2GB Micro SD
- MAC: UFT

### L2 features

- Flow control: IEEE 802.3x
- Switching mode: store-and-forward
- Spanning Tree Protocol (802.1D, 802.1w, & 802.1s)
- VLANs (802.1Q tagged based and port-based up to 4093)
- QinQ
- VTP v1/v2
- Storm control (Broadcast, Unknown multicast, Unknown unicast )
- IGMP snooping
- Ling Aggregation: LACP and Cisco EtherChannel Liked (load balance support)
- Multi-chassis LAG (MLAG)
- Link state
- Port backup

### QoS

- Priority queues: 8 queues
- Scheduling for priority queue: WRR, Strict and hybrid (WRR+Strict)
- COS: 802.1p, IP Precedence, & DSCP
- DiffServ
- iSCSI optimization
- Auto VoIP

### Security

- Static and dynamic port security (MAC-based)
- 802.1x: port-based, MAC-based, auto VLAN assignment, guest VLAN, unauthenticated VLAN
- ACL: L2/L3/L4

- IPv6 ACL: L3/L4
- RADIUS & TACACS+
- HTTPS and SSL
- SSH 1.5/v2.0
- local and remote authentication
- Denial of Service control
- Management IP filtering (SNMP/WEB/Telnet/SSH)
- MAC filtering
- IP Source Guard
- Dynamic ARP inspection (DAI)
- DHCP snooping
- Control Plane Policing (CoPP)

### Management

- CLI/SNMP v1/v2c/v3
- CLI filtering
- Telnet/SSH
- Software and configuration file download/upload: TFTP/Xmodem/FTP/SCP/SFTP
- Dual image supported
- SNMP inform
- RMON 1, 2, 3 & 9
- BOOTP: client/relay
- DHCP: client/relay/option 82
- Event/error log: local flash and remote server (RFC3164)
- Remote PING
- Traceroute
- DNS: client/relay
- SNTPv4
- LLDP (802.1ab, Link Layer Discovery Protocol)
- CDP
- UDLD
- SPAN and RSPAN
- sFlow v5
- Auto-Installation
- IPv6 management
- ONIE Installer

### Layer 3 features

- IP Multinetting/CIDR
- /31 subnets
- IP ARP
- Proxy ARP
- Local proxy ARP
- IRDP
- Static route
- Unicast Routing: OSPF, BGP with ECMP
- Multicast Routing: IGMP v1/v2/v3, DVMRP, PIM-DM/-

- SM, IGMP Proxy
- VRRP
- Loopbacks
- Source IP Configuration
- Policy-based routing

### IPv6 Layer 3 features

- Static route
- Unicast Routing: OSFPv3
- Multicast Routing: MLD v1/v2, PIM-DM6/-SM6
- Tunnels
- Loopbacks

### Datacenter features

- CN, ETS, PFC, DCBX
- FIP snooping
- VMware Tracer
- EVB, IEEE 802.1Qbg
- VXLAN/NVGRE
- Chef/Puppet

### SDN

- Openflow
- Open API

### Mechanical

- Dimension (HxWxD): 44x435x483 mm
- Weight : 9.33 kg/ 20.55 lbs (NET)

### Environmental specifications

- Operating temperature: 0~45°C
- Operating humidity: 90% maximum relative humidity

### Electrical

- Power requirement: 100~240VAC, 50/60Hz
- Power consumption: 200 Watts (tested with 10G-SR optics 100% loading 256B under 25°C ambient temp.)

### Safety

- UL, cUL, CB, CCC dfg

### EMC

- CE, FCC, VCCI, CCC

### Environmental

- Reduction of Hazardous Substances (RoHS) 6

### Order information

- LY6 (Front to Back, AC)
- LY6 (Back to Front, AC)