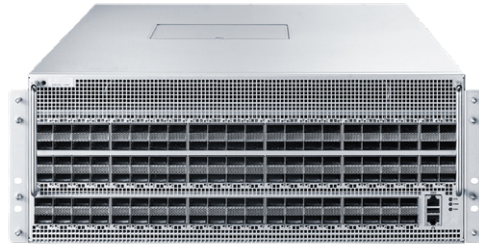


# KS400

## High Performance AI Ethernet Switch



The KS400 High Performance AI Ethernet Switch (model: KS8670 EL-128QH) is a new generation, high-density 400G switch specifically for generative AI. Adhering to open principles, it boasts powerful forwarding capabilities and a robust AI network feature set. The switch integrates 128 QSFP112 ports, features an independent management plane,

- Provides a total throughput of up to 51.2 Tb/s
- Provides 128 × QSFP-112 400G ports

leverages a commercial NOS, and can be deployed as an AIGC network switch and data center switch to satisfy user requirements for high-performance AI fabric and data center networks.

### Hardware Features

|                               |  |
|-------------------------------|--|
| <b>Model</b>                  | <b>KS8670EL-128QH</b>  |
| <b>400G QSFP-112 Ports</b>    | 128  |
| <b>Switching Capacity</b>     | 51.2Tbps   |
| <b>System Memory</b>          | 16 GB  |
| <b>Storage</b>                | 240 GB   |
| <b>BMC</b>                    | Supported  |
| <b>Management Interfaces</b>  | 1 × RJ-45 100/1000 Mbps management port  |
| <b>1 × RJ-45 console port</b> | 1x SFF OCP 3.0 Gen5 x16, supports NCSI   |
| <b>1 × USB 2.0 port</b>       | 1x RJ45, 1x UID/RST button, 1x micro USB for debug, 1x micro USB   |
| <b>Power Supply</b>           | Hot-swappable, 2+2 redundancy  |
| <b>Fan Modules</b>            | Hot-swappable, 4+1 redundancy  |
| <b>Airflow Direction</b>      | Front-to-rear  |
| <b>Dimensions (H × W × D)</b> | 173.6 × 446 × 800 mm   |
| <b>Weight</b>                 | 37.6 kg (including Power Supply Module and Fan Module)   |
| <b>Power Consumption</b>      | ≤3500W   |
| <b>Power Options</b>          | 2000 W AC & DC power modules:<br>AC: 180–264 V, 50/60 Hz<br>HVDC: 180–320 V  |
| <b>Operating Environment</b>  | Operating temperature: 5°C to 35°C<br>Storage temperature: -40°C to 70°C<br>Relative humidity: 10%–90% (non-condensing)  |
| <b>EMC</b>                    | EN61000/IEC61000 applicable standards for Emissions and Immunity Requirements EN61000-3-3 (Voltage Flicker)<br>EN61000-4-2, Level 4 (ESD) Suggest contact level 2, air level 3 EN61000-4-3 (Radiated Immunity, 3V/m)<br>EN61000-4-4, Level 2 (EFT/Burst)<br>EN61000-4-6 (Conducted Radio Frequency Immunity, 3V/m)<br>EN61000-4-8 (Power Frequency Magnetic Fields)<br>EN61000-4-11 (AC mains voltage dips and sags, fluctuations)<br>FCC Part 15, EN55032, CISPR 32: Conducted Emission, Class A (peak-reading)<br>FCC Part 15, EN55032, CISPR 32: Radiated Emission, Class A |
| <b>Safety Compliance</b>      | IEC62368   |

## Software Features

|                             |  |
|-----------------------------|--|
| <b>Model</b>                | <b>KS8670EL-128QH</b>  |
| <b>L2 Features</b>          | VLAN 802.1Q<br>MAC address table: • Dynamic, static address entries • MAC address auto learning and aging • MAC address drift suppression<br>Link aggregation: • Dynamic aggregation (LACP) • Static aggregation • LACP Fallback LLDP (802 .1 ab)<br>Storm Control: Broadcast, Unknown Unicast, Unknown Multicast Loop detection<br>Carrier Delay  |
| <b>IP Services</b>          | ARP: • Static ARP • Dynamic ARP • ARP advertisement for direct routes<br>ND: • Static ND • Dynamic ND • ND advertisement for direct routes<br>IP address conflict detection<br>VRF: • VRF Lite • Management VRF  |
| <b>IP Unicast Routing</b>   | BGP<br>Static route<br>Equal cost multi path<br>WCMP<br>Black-hole route<br>Policy-based route   |
| <b>QoS</b>                  | Queue scheduling: SP, DWRR, SP+DWRR<br>CoS: 802.1p, DSCP<br>WRED<br>ACL: L2/L3/L4, supports Remark, redirect, and other actions<br>Control Plane ACL (CAACL)<br>ACL Counter and meter<br>Port rate limiting  |
| <b>Security Features</b>    | TACACS+: Authentication, Authorization, Accounting (AAA)<br>Username and password: • Local authentication • Remote authentication via TACACS+CoPP  |
| <b>High Reliability</b>     | Multi-Chassis Link Aggregation (MC-LAG)  |
| <b>Data Center Features</b> | Network Virtualization: • VXLAN • BGP-EVPN   |
| <b>AI Network Features</b>  | Adaptive Routing (AR) Global AR<br>RDMA: • Explicit Congestion Notification (ECN) • Priority-based Flow Control (PFC) • PFC Watchdog (PFC WD)<br>Visualization: • What Just Happened (WJH)   |
| <b>O&amp;M Management</b>   | Visualized operation and maintenance (KCE) • Zero-Touch Provisioning (ZTP) • Industry-standard Command Line Interface (CLI) • RoCE one-click deployment • SNMP v 1/v2c/v3 • Netconf Restful API • gRPC • sFlow • SSH v2.0/Telnet DHCP relay • Smart relay • DHCP client (management port supported) • NTP • PING/Traceroute • Local mirroring • Remote mirroring: ERSPAN • License • Software and configuration file transfer: FTP, TFTP • Patch management: Supports hot patch • One-click switch health check, and one-click switch information collection • System log • Optical module information management • Temperature monitoring |