

## KS400L

# High Performance AI Ethernet Switch



The KS400L High Performance AI Ethernet Switch (model: KS8670EL-64D) is a new generation, high-density 400G intelligent computing switch specifically designed for generative AI. The system integrates 64 QSFP-DD ports, provides robust forwarding performance, and supports an independent management plane. This switch adopts a commercial NOS and provides comprehensive AI networking capabilities to boost bandwidth

- Provides a total throughput of up to 25.6 Tb/s
- Provides 64 × QSFP-DD 400G ports

utilization in AIGC scenarios. Seamlessly integrated with the KCE Intelligent Operation & Management Platform, it enables one-click deployment, expedites the launch of AI services, and satisfies users' requirements for high-performance AI fabric and data center networks.

### Hardware Features

<b>Model</b>	<b>KS8670EL-64D</b>
<b>400G QSFP-DD Ports</b>	64
<b>25G SFP28 Ports</b>	2
<b>Switching Capacity</b>	25.6Tbps
<b>Packet forwarding rate</b>	33.3Bpps
<b>System Memory</b>	16 GB
<b>Storage</b>	240 GB, PLP supported
<b>BMC</b>	Supported
<b>Management Interfaces</b>	1x RJ-45 100/1000 Mbps management port, 1x RJ-45 console port, 1x USB 2.0 port
<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>	37.8 kg (including Power Supply Module and Fan Module)
<b>Power Consumption</b>	< 2500W
<b>Power Options</b>	1300 W AC & DC power modules: AC: 180–264 V, 50/60 Hz HVDC: 180–320 V
<b>Operating Environment</b>	Operating temperature: 0°C to 40°C Storage temperature: -40°C to 70°C Relative humidity: 10%–90% (non-condensing)
<b>EMC</b>	EN61000/IEC61000 applicable standards for Emissions and Immunity Requirements EN61000-3-2 (Harmonic Current Emission, Class A) EN61000-3-3 (Voltage Flicker) EN61000-4-2 (ESD Immunity - contact level 2, air level 3) EN61000-4-3 (Radiated Immunity, 3V/m) EN61000-4-4 (EFT Immunity - level 2)

<b>EMC</b>	EN61000-4-5 (Surge Immunity - level 3) EN61000-4-6 (Conducted Radio Frequency Immunity, 3V/m) EN61000-4-8 (Power Frequency Magnetic Fields, v1A/m) EN61000-4-11 (AC mains voltage dips and sags, fluctuations) FCC Part 15, EN55032, CISPR 32: Conducted Emission, Class A FCC Part 15, EN55032, CISPR 32: Radiated Emission, Class A
<b>Safety Compliance</b>	IEC62368

## Software Features

Model	KS8670EL-64D
<b>L2 Features</b>	VLAN 802.1Q MAC address table: • Dynamic, static address entries • MAC address auto learning and aging • MAC address drift suppression Link aggregation: • Dynamic aggregation (LACP) • Static aggregation • LACP Fallback LLDP (802.1ab) Storm Control: Broadcast, Unknown Unicast, Unknown Multicast Loop detection Carrier Delay
<b>IP Services</b>	ARP: • Static ARP • Dynamic ARP • ARP advertisement for direct routes ND: • Static ND • Dynamic ND • ND advertisement for direct routes IP address conflict detection VRF: • VRF Lite • Management VRF
<b>IP Unicast Routing</b>	BGP Static route Equal cost multi path WCMP Black-hole route Policy-based route
<b>QoS</b>	Queue scheduling: SP, DWRR, SP+DWRR CoS: 802.1p, DSCP WRED ACL: L2/L3/L4, supports Remark, redirect, and other actions Control Plane ACL (CAACL) ACL Counter and meter Port rate limiting
<b>Security Features</b>	TACACS+: Authentication, Authorization, Accounting (AAA) 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 RDMA: • Explicit Congestion Notification (ECN) • Priority-based Flow Control (PFC) • PFC Watchdog (PFC WD) 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 v1/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 • Port splitting, speed reduction • Optical module information management • Temperature monitoring • Fan management • Power supply module management