



**L3 | Web, Console | 48 Ports 10G SFP+ |  
2 Ports 40G QSFP+ | 4 Ports 100G QSFP28**

## PRODUCT OVERVIEW

The **RS-L3-48X-2Q-4Z** is a state-of-the-art enterprise-grade core Layer 3 switch meticulously designed to meet the high-performance demands of data centers, high-end campuses, and next-generation networking environments. With an advanced hardware architecture delivering an impressive 1.92 Tbps switching capacity, this switch ensures robust and reliable operations across various network environments. The **RS-L3-48X-2Q-4Z** integrates sophisticated features such as 48 x 10GE SFP+ ports, 2 x 40GE QSFP+ ports, and 4 x 100GE/40GE QSFP28 ports, providing administrators with unparalleled flexibility and performance optimization.

The switch's feature set includes comprehensive management options (Console, Telnet, SSH v1/2, HTTP, HTTPS, SNMP v1/v2/v3, RMON, NTP, TFTP, SFTP) and advanced routing capabilities, including BGP, OSPF, RIP, Static Routes, IPv4/v6 dual stack, MPLS Multi-VRF, IPv6 Static Routing, RIPng, OSPFv3, and BGP4+. It also supports key IPv6 protocols such as ICMPv6, DHCPv6, ACLv6, and IPv6 Telnet for enhanced networking flexibility.

Security is a top priority, with features like port isolation, port security, "IP+MAC+port" binding, MAC sticky, DAI, IP source guard, and protection against DDoS attacks, including TCP SYN Flood, UDP Flood, and unicast storm-control.

These capabilities ensure the **RS-L3-48X-2Q-4Z** meets the demands of complex deployment environments. Its high throughput, multiple 10G SFP+, 40G QSFP+, 100GE QSFP28 ports, and advanced Layer 3 routing protocols enhance its versatility and performance, making it suitable for top-of-the-rack deployment as a **Data Center Core Switch**. The switch offers exceptional scalability and reliability, positioning it as a leading solution for high-performance networking.

## Key Features

- **Port Configuration:**
  - 48 x 10GE SFP+ ports
  - 2 x 40GE QSFP+ ports
  - 4 x 100GE/40GE QSFP28 ports
- **High Throughput:** Delivers 1.92 Tbps throughput, supporting high-performance data center networking demands.
- **Management:** Supports Console, Telnet, SSH v1/2, HTTP, HTTPS, SNMP v1/v2/v3, RMON, NTP, TFTP, and SFTP.
- **Routing:**
  - BGP, OSPF, RIP, Static routes, IPv4/v6 dual stack
  - MPLS Multi-VRF for advanced routing capabilities
  - IPv6 Static Routing, RIPng, OSPFv3, BGP4+
  - ICMPv6, DHCPv6, ACLv6, and IPv6 Telnet
- **Security:**
  - Port isolation, port security, "IP+MAC+port" binding, MAC sticky, DAI & IP source guard, PPPoE
  - L2/L3/L4 ACL flow identification and filtration
  - Protection against DDoS attacks, unicast storm-control, TCP SYN Flood, UDP Flood, etc.
- **Reliability:**
  - VRRP, static/LACP link aggregation, BVSS virtual stacking
  - 1+1 power backup, URPF, LLDPISU, EAPS, and ERPS



## Specifications:

|   |  |
|---|--|
| INTERFACE                               | 48 10GE/GE SFP+ PORTS,<br>2 40GE QSFP+ PORTS,<br>4 100GE/40GE QSFP28 PORTS |
| CONSOLE(RJ45)                           | 1 RJ45CONSOLE<br>1 MGMT  |
| BACKPLANE(Gbps)                         | 1920   |
| FORWARDING RATE<br>(Mpps WITH 64 BYTES) | 1440   |
| CHASSIS                                 |  |
| DIMENSIONS (WXDXH)(MM)                  | 440X404X44   |
| WEIGHT(KG)(EMPTY)                       | 8.8  |
| PACKAGE                                 |  |
| DIMENSIONS (WXDXH)(MM)                  | 616X488X140  |
| WEIGHT(KG)                              | 10   |
| POWER CONSUMPTION                       |  |
| NO-LOAD                                 | 102W   |
| FULL LOAD                               | 147W   |
| POWER SUPPLY                            |  |

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| AC: 100V-240V, 50/60Hz               | 2 (2 POWER SLOTS WITH 2 HOT-SWAP) |
| Power Status Monitoring              | SUPPORT                           |
| TOTAL OUTPUT BTU<br>(1000BTU/H=293W) | 501.71                            |
| FAN NUMBER                           | 5                                 |
| NOISE@25°C(dBA)                      | 57                                |
| MTBF(H)                              | > 20,0000                         |
| FORWARDING MODE                      | Store - Forward                   |
| FLASH (GB)                           | 2 GB                              |
| DRAM (MB)                            | 1 GB                              |
| MAC                                  | 64K                               |
| JUMBO FRAME                          | 16K                               |
| Total SVI                            | 1K                                |
| Routing table (ipv4 / ipv6)          | 16K / 8k                          |
| ARP table                            |                                   |
| IPv4                                 | 16K                               |
| IPv6                                 | 2K                                |

## Product Features

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| <b>VLAN</b>  |
| 4K Active VLAN, QinQ & Selective   |
| QinQ, GVRP, Private VLAN, Voice VLAN   |
| <b>Spanning Tree</b>   |
| 802.1D (STP)   |
| 802.1W (RSTP) and 802.1S (MSTP)  |
| BPDU guard,root guard and loopback guard   |
| <b>Multicast</b>   |
| PIM-SM, PIM-DM   |
| IGMP v1/v2/v3  |
| IGMP Snooping, IGMP Fast Leave   |
| MVR, IGMP filter   |
| <b>IPv4</b>  |
| Static route, RIP v1/v2  |
| OSPF, BGP, PBR, ECMP   |
| BFD for OSPF, BGP  |
| IPv4/v6 dual stack   |
| <b>IPv6</b>  |
| <ul style="list-style-type: none"> <li>ICMPv6, DHCPv6, ACLv6 and IPv6 Telnet.</li> <li>IPv6 neighbor discovery, Path MTU discovery.</li> <li>MLD V1/V2, MLD snooping.</li> <li>IPv6 Static Routing, RIPng, OSPFv3, BGP4+.</li> <li>Manual tunnel, ISATAP tunnel, 6 to 4 tunnels</li> </ul> |
| <b>MPLS</b>  |
| Multi-VRF  |
| <b>QoS</b>   |
| CAR, HQoS, MAC/IP/TCP/UDP/ VLAN/COS/DSCP/TOS based QoS   |

|  |
|--|
| 802.1P/DSCP priority re-labeling, SP,WRR, and "SP+WRR", Tail-Drop                              |
| WRED, flow monitoring and traffic shaping  |
| <b>Security</b>  |
| Port isolation, Port security, and "IP+MAC+port" binding, MAC                                  |
| Sticky DHCP Snooping and option 82, DAI & IP source guard, PPPoE+                              |
| IEEE 802.1x, Radius and Tacacs+L2/L3/L4 ACL flow identification and filtrationAnti-attack from |
| DDoS, TCP's SYN Flood, UDP Flood, etc.Broadcast/multicast/unknown unicast storm-control        |
| MD5, SHA-256, RSA-1024, AES256, etc.   |
| <b>Reliability</b>   |
| Static/LACP link aggregation,  |
| Interface backup   |
| BVSS virtual-stacking  |
| EAPS and ERPS  |
| ISSU   |
| <b>Management</b>  |
| Console, Telnet, SSH v1/2, HTTP  |
| HTTPSSNMP v1/v2/v3, RMON   |
| TFTP, FTP, SFTP  |
| NTP, SPAN, RSPAN   |
| ZTP(Zero Touch Provisioning)   |
| <b>Environment</b>   |
| Operating temperature/humidity: 0°C -50°C, 10%-90% non-condensing                              |
| Storage temperature/humidity:-20°C -70°C, 5%-95% noncondensing                                 |
| <b>Accessories</b>   |
| Power cord, rackmount kits, console cable  |

## Warranty and Support

| Essential                | Premium   |
|--------------------------|---|
| Available for 3 years    | Available for 1,3,5 years                       |
| Tech Support for 90 Days | Advanced Replacement and NBD Shipping Available |
|                          | 24*7 Email Tech Support                         |

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