

LA-SWM3-DC100G06X10G48

Data Center Switch 48 x 10G SFP+, 6 x 100G QSFP28



Overview

LA-SWM3-DC100G06X10G48 is a high density and low latency switch with 48x25Gbps SFP28 and 6x100Gbps QSFP28 ports in a single 1RU for data centers and high-end campus networks. It is high performance aggregation ToR (Top of Rack) switch for telco access, security and cloud, with advanced best- in- class, open-source network platform that line- rate L2 / L3 up to 2.16Tbps (1.08Tbpsx2) switching performance of Marvell Aldrin2 is paired with multi service features.

The power supply and fan modules are hot-swappable, supporting 1+ 1 and 4+ 1 redundancy respectively. Allowing maximum flexibility, the port speeds span from 10Gbps to 100Gbps per port and port density that enables full rack connectivity to any server at any speed. Each 100G QSFP28 port can be configured 40G, 4x25GbE or 4x10GbE via breakout cables.

We support open-source Open Network Install Environment (ONIE) for zero touch installation of SONiC networking operating system or commercial OcNOS system.



Features

- Compact 1RU standard, 19-inch rack mountable design
- Cut-through with ultra-low-latency
- 2 (1+1 redundant) Redundant Hot-swappable PSU
- 5 (4+1 redundant) Hot-swappable Fan
- 48 x 10 Gbps (SFP+) ports and 6 x 100 Gbps (QSFP28) ports
- Each 100G QSFP28 port can be configured 40G, 4x25GbE or 4x10GbE via breakout cables
- Up to 2.16Tbps (1.08Tbpsx2) of switching performance
- Open automated configuration and zero-touch provisioning capabilities
- Simplify management of network environments
- Interface flexibility & Power efficiency

Specifications

Provided Fix Ports	48 x 10 Gbps (SFP+) ports, 6 x 100 Gbps (QSFP28) ports
Management Ports	1x RJ45 100/1000Base-T out-of-band 1x RJ45 Console, 1x USB Type A
Switching Chip	Marvell Aldrin2 98DX8548
CPU	Maverll Octeon TX2 CN9130
Memory	4GB DDR4
Storage	SSD: 32GB eMMC, optional M.2 STAT slot
Power Supply Units	PSU Input: 110V-240 VAC, 36 -72V DC PSU Output: 200w (AC/ DC) 1 + 1 hot pluggable
Power Consumption	≤180w
Fan Unit	5 (4+1 redundant), Hot swappable
Form Factor and Dimension	445×470×44mm (WxDxH)
N.W.	9.5KG
Operating Temperature	0°C-45°C
Storage Temperature	-40°C- 70°C
Operating Humidity	5%-95% (non-condensing)
Storage Humidity	5%-95% (non-condensing)
Operating Altitude	3000m max



Safety Regulation Compliance	UL/CSA, cUL, CB
Switching Capacity	2.16Tbps (1.08Tbpsx2)
Forwarding Rate	1.6Gpps
Jumbo Frames	Yes
Packet Buffer Size	6MB
Transmit Descriptors	32K
Bridge FDB Entries	Up to 256K
Router IPv4 Host Entries	Up to 16K Unicast prefixes (LP32M)1 or Up to 3K (*,G) addresses
Router IPv6 Host Entries	Up to 8K Unicast prefixes (LPM) 3 or Up to 0.5K (*,G) addresses
Router LPM	IPv4 - up to 16K unicast prefixes IPv6 - up to 8K unicast 64-bit prefixes
TCAM Resources (Shared between TTI, IPCL and EPCL Classification Engines)	9K x 10B rules
Virtual Ports (ePorts)	8K
Bridge Domains (eVLANs)	8K
Multicast Physical Port Groups (VIDX)	4K
Multicast Virtual Port Groups (eVIDX)	16K
Multicast Linked List (MLL) Entries	16K
Tunnel-Start/ARP Table	Up to 32K ARP entries Up to 8K Non-IPv6 Tunnel-Start entries Up to 4K IPv6 Tunnel-Start entries
Router Next Hop Entries	8K
Router ECMP Groups	8K
ePort ECMP Groups	8K
Trunk ECMP Group	4K
QoS Profiles	1K
Hardware OAM Flows	2K
Spanning Tree Groups	1K



Optional Software

*License fee will be quoted separately according to different project management requirements.

- MAC-Based VLANs
- Voice VLAN
- Multicast TV VLAN
- Triple Play, MVR
- Q-in-Q, Selective Q-in-Q
- Multicast Bridging Mode
- Static Multicast Groups
- IGMP Snooping
- MLD Snooping
- Flooding of Unregistered Multicast Frames
- Per-device Spanning Tree
- Rapid Spanning Tree
- Multiple Spanning Tree
- STP Root Guard
- BPDU Filtering
- STP BPDU Guard
- Per-device Loopback Detection (LBD)
- LACP
- LAG Balancing
- Static and Dynamics (DHCP/BootP) IP assignment
- DNS Client
- IPv6 Host
- Dual Stack
- ISATAP Tunneling
- MAC-based Port Security (Locked Port)
- 802.1x Port-Based Authentication
- Time Based 802.1x
- Guest VLAN
- Unauthenticated VLANs
- 802.1x MAC Authentication
- Action-on-Violation
- Flow Monitoring (sFlow)
- RADIUS Remote Authorization and Authentication
- RADIUS Accounting
- TACACS+













Utilizing Diverse Platforms and Operating Systems for Tailored Solutions.



- DHCP Snooping
- IP Source Address Guard
- ARP Inspection
- DoS Attack Prevention
- SSL
- SSH
- QoS Across the Stack
- QoS statistics
- Egress Rate Limiting (Shaping)
- Ingress Rate Limiting
- Packet Storm Control
- Dynamic VLAN Assignment

Ordering Information

P/N	Description
LA-SWM3-DC100G06X10G48	Data Center Managed Switch 48 x 25G SFP28, 8 x 100G QSFP28





https://www.lanaotek.com



Specifications & design are subject to change without prior notice.

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