



DS1000

1U 48-port 1GbE Access Switch



An Open Compute Project (OCP) accepted design, the DS1000 Ethernet switch offers 48 x 10/100/1000Mbps RJ45 ports and 8 SFP+ ports within a 1U form factor. With support for a COM-E modular atom-based control plane, the DS1000 includes an ONIE installer to support third-party network operating systems.

FEATURES

Interfaces: 48 x 10/100/1000Base-T RJ45 Copper ports, 8 x SFP+ 10Gigabit fiber ports, 1 x Console Port base on RJ45, 1 x Out of band management port base on 10/100/1000Mbps RJ45, 2 x Type A USB 2.0 ports

Switching Capacity: 128Gbps; Packet Buffer of 4MB

CPU: Intel Denverton 4-Core; 4GB ECC DDR4, configurable to 32GB; 64Gb iSLC M.2 configurable SSD

SFP+ DAC Support: 7m

SFP+ Optical Module Support: Up to 2W power

LAYER TWO HARDWARE SUPPORTED

VLAN Learning, Shared VLAN switching, VLAN double tagging

HW based address learning, MAC address aging (except static MAC address)

Class based learning

IEEE 802.3 packet sizes (64 bytes to 1522 bytes), Jumbo packet up to 12,288 bytes

Multicast

Spanning tree

Storm Control

IEEE 802.3ad LAG

Ingress/Egress mirroring

DSCP



Enterprise-Class Quality. Cloud Economics.

LAYER THREE HARDWARE SUPPORTED

IPv4, IPv6
VRF
IP Multicast
IPv6 Tunneling
GRE Tunneling
Server Virtualization/VN-Tag/VEPA/IEEE 802.1Qbh
VxLAN
RIOT
Tunnel Encap/Decap
Resilient Hashing
Pre-Classification Content Aware Processor (VFP)
Content Aware Processing (IFP/EFPP)
Port Security (IEEE 802.1x)
BroadShield™ DoS Attack Prevention
QoS
Priority Flow Control (PFC) IEEE 802.1bb
Flexible Counters
Network Time Sync
MIB – RFC 2613, 2819, 1213, 2836, 1643, 1493; IEEE 802.3u
CMICx
Ethernet OAM
Flow Control
Bridge Port Extender IEEE 802.1Qbg, 802.1BR
Energy Efficient Ethernet (EEE)

POWER AND COOLING

Under 200W peak consumption, 1+1 redundant hot swap PSUs
90-264VAC 47Hz/63Hz AC/DC PSU
2+1 Fixed 40 mm x 40 mm x 28 mm fans

PHYSICAL DIMENSIONS

Height: 43.6 mm (1U)
Width: 438.5 mm
Depth: 370 mm

ENVIRONMENTAL: OPERATING

Temperature: 0°C to 45°C @ 3000ft/900 m
Humidity: 5% to 90%, non-condensing
MTBF: Excess of 150,000 hours

APPROVALS

Acoustic: EN300753
Waste Electrical and Electronic Equipment (WEEE): Directive 2012/19/E
European Union ROHS directive: 2011/65/EU& 2015/863
SVHC requirements of REACH directive: (EC) No. 1907/2006
EMC: Class A - USA, Canada, Europe, China, Japan, Korea, Australia, Brazil, South Africa
Safety: UL/CSA/IEC/EN 60950-1/62368-1
PSU: CE, CCC, KC, TUV, UL/cUL, BIS and BSMI

ORDER INFORMATION

R3059-F9022-A1: DS1000, 1U, 48x 1GbE + 8x 10GbE, COMe 4C/8GB-DDR/32GB-SSD (B2F)

R3059-F9021-A1: DS1000, 1U, 48x 1GbE + 8x 10GbE, COMe 4C/8GB-DDR/32GB-SSD (F2B)

FRU

R3059-F8001-01: AC PSU FRU, DS1000 F2B

R3059-F8002-01: AC PSU FRU, DS1000 B2F

Note: All specifications and figures are subject to change without prior notice.