DATACOM

DM4380

100GE ACCESS AND AGGREGATION SWITCH

DATASHEET

DM4380

100GE ACCESS AND AGGREGATION SWITCH

IP/MPLS SWITCH POWERED BY DmOS NETWORK OPERATION SYSTEM, WITH 10GE AND 100GE INTERFACES FOR HIGH CAPACITY AND VALUE ADDED METRO EHTERNET APPLICATIONS.

The DM4380 switch provides high switching capacity to meet the growing demands for IP traffic on Metro Ethernet access and aggregation networks, high capacity enterprise networks, and aggregation of servers and networks in Datacenters, always offering high capacity and reliability.

Powered by the DmOS network operating system, the DM4380 switch guarantees robustness and high availability of services on a platform with support for a series of L2, L3 and MPLS functionalities. The main supported features are VLAN operations such as QinQ and VLAN Translate, LAG / LACP, ring operation through EAPS or ERPS protocol, RSTP support, static and dynamic IP routing protocols through OSPF and BGP, access policy creation filters (ACL), QoS functionality, among others. MPLS transport and aggregation capabilities are available through LDP for point-to-point (VPWS) and point-to-multipoint (VPLS) services, and L3VPN for IP Services. All L2, L3 and MPLS packets forwarding, filter application and QoS policies are done in HW, guaranteeing wirespeed operation.

The product offers configuration via command line (CLI) accessible by SSHv2, Telnet and RS-232 or USB console port. RADIUS and TACACS functionalities enable the creation of authentication and authorization policies for user access. Local and remote Syslog features, NTP, DHCP, and SNMP clients are also available to enable remote management and troubleshooting.

The DM4380 switch is an 1U high equipment ready for installation in standard 19 inch racks. It features power redundancy through two hot-swap slots for AC or DC power supplies, ensuring high availability services.

- Switch with 12x 10GbE optical ports (SFP+)

- Three 40GbE/100GbE (QSFP28) uplink ports

- Compact design, 1U height

- VLAN, QinQ, VLAN Translate, ERPS and EAPS support for Metro Ethernet applications

- MPLS LDP, VPWS and VPLS and L3VPN support

- Static and dynamic routing through OSPF or BGP

- Two hot-swap slots for redundant AC or DC power supplies

DmOS

Technical Specifications

		DM4380 12XS+3CX
HARDWARE CHARACTERISTICS	Power supply	2 hot swappable slots for PSUs compatible with PSU 125 DC and PSU 125 AC
	PSU 125 AC – Power Input	100Vac to 240Vac
	PSU 125 DC – Power Input	-40,5Vdc to -72Vdc
	Maximum power consumption	120W
	Typical power consumption	90W
	Operational temperature (*)	0°C to 55°C (*)
	Operational relative humidity	10% to 90%, non-condensed
	Operational altitude	0 to 3000m
	Storage temperature	-20ºC to 70ºC
	Storage relative humidity	10% to 90%, non-condensed
	Dimensions in mm (H x D x W)	44 x 265 x 444 (482 with brackets)
	Weight (kg)	3,00
INTERFACES	1G/10G Base-X (SFP+)	12
	40G/100G Base-X (QSFP28)	3
	GE Out-of-band Management (RJ45)	1
	Console (RJ45)	1
	USB Console (type A)	1
	USB Data (type B)	1
	Throughput	840 Gbps
	Packets per Second	625 Mpps

(*)For temperatures above 45º C, extended temperature optical modules may be necessary.

NOTE : To check product features, consult the DmOS datasheet.

STANDARDS

ANATEL

Resolução 242 (Nov 30, 2000)

Rules for Certification and Homologation of Telecommunication Products.

Resolução 323 (Nov 7, 2002)

Standard for Certification of Telecommunication Product.

Resolução 442 (July 21, 2006)

Rules for the Certification of Telecommunication Equipment in Aspects of Electromagnetic Compatibility.

ETSI

EN 300 019-1-1, Class 1.2	Environmental Conditions for storage
EN 300 019-1-2, Class 2.3	Environmental Conditions for Transport
EN 300 386 V1.6.1 (2012-09)	Electromagnetic compatibility and Radio spectrum Matters (ERM)
EN 55022	Information technology equipment. Radio disturbance characteristics - Class A

IEC

60825-1	Laser Safety Class
61000-4-11	Voltage dips, short interruptions and voltage variations immunity tests
61000-4-6	Immunity to conducted disturbances, induced by radio-frequency fields
EN 61000-4-2	Electrostatic Discharge Immunity Test
EN 61000-4-4	Electrical fast transient/burst immunity test
EN 61000-4-5	Surge immunity test

ORDERING INFORMATION

Model	Description
DM4380 12XS+3CX *800.5258.xx*	Managed L2, L3 and MPLS switch, with 12x 1/10GbE ports on SFP/SFP+, 3x 40/100GbE ports on QSFP28, out-of-band management interfaces, RS232 console and USBs. 1U metal cabinet for 19"rack. SFPs, SFP +, QSFP + and QSFP28 modules purchased separately. AC or DC power supplies with redundancy support (purchased separately). MPLS functionality requires separately purchased license.
PSU 125 DC *800.5188.xx*	DC power supply with -48 to -60Vdc input, 125W. Supports hot-swap and redundant operation.
PSU 125 AC *800.5187.xx*	AC power supply with 100-240Vac and 50/60Hz input. 125W. Supports hot-swap and redundant operation.
DM4380 SW MPLS license *012.4213.xx*	Software with MPLS capabilities for DM4380 12XS+3CX. License per unit.

DATACOM

OPTICAL MODULES AND CABLES

Accessory	Description
MO QSFP+ ETH - 40GBase-ER4 (40km) *377.1400.00*	Optical 40GBase-ER4 QSFP+ module. Single mode with LC connector, dual fiber. Maximum reach of up to 40km. Performs monitoring via Digital Diagnostics.
MO QSFP+ ETH - 40GBase-LR4 (10km) *377.1401.00*	Optical 40GBase-LR4 QSFP+ module. Single mode with LC connector, dual fiber. Maximum reach of up to 10km. Performs monitoring via Digital Diagnostics.
MO QSFP+ ETH - 40GBase-SR4 (0,1km) *377.1402.00*	Optical 40GBase-SR4 QSFP+ module. Multimode with MPO connector. Maximum reach of up to 100m. Performs monitoring via Digital Diagnostics.
MO QSFP28 ETH - 100GBase-ER4 (40km) *377.1405.00*	Optical 100GBase-ER4 QSFP28 module. Single mode with LC connector, dual fiber. Maximum reach of up to 40km. Performs monitoring via Digital Diagnostics.
MO QSFP28 ETH - 100GBase-LR4 (20km) *377.1415.00*	Optical 100GBase-LR4 QSFP28 module. Single mode with LC connector, dual fiber. Maximum reach of up to 20km. Performs monitoring via Digital Diagnostics.
MO QSFP28 ETH - 100GBase-LR4 (10km) *377.1404.00*	Optical 100GBase-LR4 QSFP28 module. Single mode with LC connector, dual fiber. Maximum reach of up to 10km. Performs monitoring via Digital Diagnostics.
MO QSFP28 ETH - 100G 4WDM-10 (10km) *377.1414.00*	Optical 100G 4WDM-10 QSFP28 module. Single mode with LC connector, dual fiber. Maximum reach of up to 10km. Performs monitoring via Digital Diagnostics.
MO QSFP28 ETH - 100GBase-SR4 (0,1km) *377.1403.00*	Optical 100GBase-SR4 QSFP28 module. Multimode with MPO connector. Maximum reach of up to 100m. Performs monitoring via Digital Diagnostics.
QSFP+ to QSFP+ Direct Attach Copper Cable 1m *710.0384.00*	Copper cable for interconnection of 40 Gigabit Ethernet ports, 1m length.
QSFP+ to QSFP+ Direct Attach Copper Cable 3m *710.0391.00*	Copper cable for interconnection of 40 Gigabit Ethernet ports, 3m length.
QSFP28 to QSFP28 Direct Attach Copper Cable 1m *710.0395.00*	Copper cable for interconnection of 100 Gigabit Ethernet ports, 1m length.
QSFP28 to QSFP28 Direct Attach Copper Cable 3m *710.0396.00*	Copper cable for interconnection of 100 Gigabit Ethernet ports, 3m length.
SFP+ 10GbE *PN: Inquire*	Optical 10 Gigabit Ethernet SFP+ modules. Several models with varying power and reach specifications are offered.

DATACOM