DATACOM

DM4370
10GE ACCESS SWITCH

DATASHEET

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COMPACT L2/L3/MPLS SWITCHES WITH 10G UPLINKS FOR METRO ETHERNET DEMARCATION AND ACCESS

The DM4370 switch offer high switching capacity to meet the increasing demands of access and demarcation of Metro Ethernet services with high performance and reliability.

The switch is based on Datacom´s DmOS modular network operating system, ensuring robustness and high availability of services on a platform supporting a series of L2 / L3 / MPLS functionalities, including the support for VLAN operations such as QinQ and VLAN Translate, LAG / LACP and ring operation through EAPS or ERPS protocols. The product also support RSTP, static IP routing and dynamic IP routing through OSPF and BGP protocols, MPLS, access control lists (ACLs), QoS, among others.

DM4370 innovates by bringing MPLS up to the point of access, ensuring the delivery of transparent LAN-to-LAN circuits. With the LDP infrastructure, it is possible to implement point-to-point VPN services (VPWS).

All L2 / L3 / MPLS packet forwarding and routing as well as ACLs processing QoS is done at the hardware level, ensuring wirespeed operation for any scenario and with all packet sizes.

The product offer configuration via command line (CLI) accessible locally through RS-232 or USB console port or remotely through SSHv2 or Telnet. RADIUS and TACACS functionalities allow the creation of management policies with different levels of authentications and user access authorizations. For remote management and troubleshooting, the product supports features like Syslog, SNTP and SNMP.

DM4370 switches are compact 1U units with metal cabinet enclosures. They feature an internal universal AC / DC power supply with automatic selection and an optional external power supply for redundancy. Up to two devices can be installed side by side in a 19" rack through a mounting adapter.

- Compact desktop design, with 1U height.

- 4x 10GE ports (SFP+)

- 8x GE ports, with 4x optical SFP plus 4x electrical RJ45

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

- L2 protocol tunneling to service LAN-to-LAN services

- Static and dynamic routing through OSPF and BGP protocols

- Support for MPLS protocol

- Integrated full-range AC / DC power supply with automatic selection and optional redundancy via external PSU

The DM4370 switch has 4x 10GE SFP+ interfaces that can be used for both service access links greater than 1GE and also as an uplink interface for 10GE aggregation rings. In addition, services with more than 10GE can be designed with Link Aggregation and LACP.

APPLICATIONS

METRO ETHERNET ACCESS AND AGGREGATION

Through its SFP based GE/10GE interfaces and the L2/L3 and MPLS functionalities, the DM4370 switch is the best solutions for Metro Ethernet access and aggregation applications, offering a reliable and highly available solution for enterprise and residential services. The product supports linear, star and ring topologies, assuring the flexibility needed for different network infrastructure topologies.
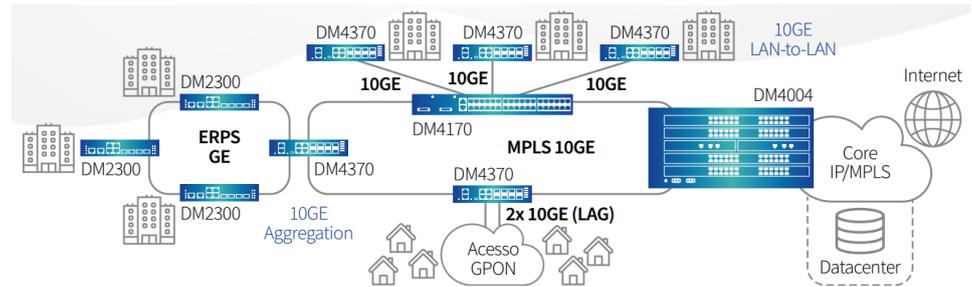
IP SERVICES ACCESS

The DM4370 switch supports hardware based packet routing, forwarding and filtering, and through OSPF and BGP protocols, ACLs filtering up to L4 and QoS functionalities, the product can be used as an IP access solution for up to 10Gbps high value added enterprise services, assuring redundancy through features like LACP and VRRP, depending on the network topology and architecture.
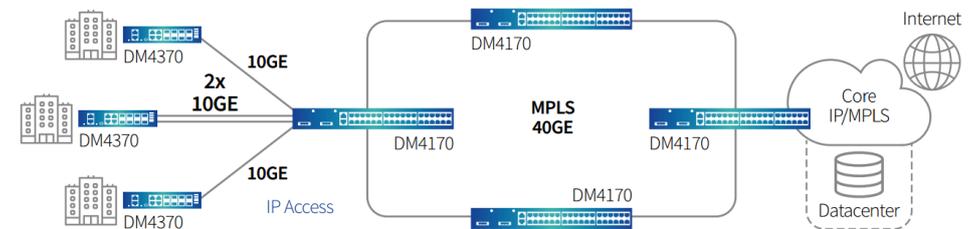
TECHNICAL SPECIFICATIONS

		DM4370 4GT+4GX+4XS
SCALABILITY	Wirespeed switching capacity	96 Gbps / 129 Mpps
	Packet Buffers	2MB
	MAC Table	32k
	L3 Routes	Shared table with 1024 IPv4 / 512 IPv6 (64 bits) Additional table with 256 IPv6 (128 bits)
	L3 Hosts	2k IPv4 / 1k IPv6
	Multicast groups	256
HARDWARE CHARACTERISTICS	Power Supply	Universal integrated AC (100 - 240V 50/60Hz) and DC (48 - 60Vdc). DC 12V input for optional external adapter
	Maximum power consumption	33W
	Typical power consumption	21W
	Operational temperature	0°C to 55°C**
	Operational relative humidity	10% to 90%, non-condensed
	Operational altitude	0 to 3000m
	Storage temperature	-20°C to 70°C
	Storage relative humidity	10% to 90%, non-condensed
	Dimensions (HxWxD)	43 x 189 x 191mm
	Weight	1.3kg
INTERFACES	10/100/1000Base-T (RJ45)	4
	1000Base-X (SFP)	4
	10GBase-X (SFP+)	4
	GE Out-of-band management (RJ45)	1
	Console (RJ45)	1
	USB Type Mini-B	1
PERFORMANCE	Throughput	96 Gbps
	Packets per Second	80 Mpps

(**) BY USING COMMERCIAL GRADE SFP / SFP+ THE MAXIMUM RECOMMENDED OPERATING ENVIRONMENTAL TEMPERATURE FOR THE PRODUCT IS 45°C. FOR THE PRODUCT TO OPERATE IN MAXIMUM ENVIRONMENTAL TEMPERATURE OF 55°C, INDUSTRIAL CATEGORY SFP / SFP+ MUST BE USED. CONSULT DATACOM FOR MORE INFORMATION

STANDARDS

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

ACCESSORIES

Accessory	Description
SFP+ 10GbE *PN: Inquire*	Optical 10 Gigabit Ethernet SFP+ modules. Several models with varying power and reach specifications are offered.
SFP 1GbE *PN: Inquire*	Optical Gigabit Ethernet SFP modules. Several models with varying power and reach specifications are offered.
MA-01 Tray *800.0141.xx*	Tray for installing up to two devices side-by-side on 19" racks.
External AC PSU *820.8005.xx*	Optional AC 100-240V / 50-60Hz to 12Vdc, 3A external power supply unit for redundancy.

ORDERING INFORMATION

Model	Description	
DM4370 4GT+4GX+4XS *800.5191.xx*	L2 / L3 / MPLS wirespeed switch with 4 Gigabit electrical ports (RJ45), 4 Gigabit Ethernet optical ports (SFP) and 4 10 Gigabit Ethernet optical ports (SFP +). Integrated AC / DC power supply with automatic selection and 12V input for optional redundant power. Standalone unit, 1U metal cabinet. License required for MPLS functionalities.	
DM4370 – MPLS License *012.4204.00*	Software license to enable MPLS functionalities on DM4370 switch.	-

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