DATACOM

DM4050
ETHERNET SWITCH

DATASHEET

DM4050

ETHERNET SWITCH

HIGH CAPACITY GE/10GE L2/L3 SWITCHES FOR ETHERNET ACCESS AND AGGREGATION NETWORKS

DM4050 family switches provide the ideal solution to meet the growing demands of traffic aggregation and access to services on Metro Ethernet and high-capacity local area networks.

DM4050 family is equipped with Datacom´s DmOS modular network operating system, ensuring robustness and high availability of services on a platform with support for a number of L2 / L3 functionalities, like the support for VLAN operations such as QinQ and VLAN Translate, LAG / LACP, ring operation through the EAPS protocol, RSTP support, OSPF and BGP routing protocols, access policy creation (ACL) filters, QoS functionality, among others.

Two switch models are available, one with electrical interfaces and the other with optical interfaces, both containing six 10GE uplink interfaces based on SFP+ connectors. All L2 / L3 packet forwarding is done in HW, as well as filter applications and QoS policies, ensuring wirespeed operation for any packet size.

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

DM4050 family switches are compact 1U height units ready for installation on standard 19-inch racks. They feature power redundancy through two hot-swap slots for universal AC / DC power supplies with automatic selection, enabling the operation of high availability services.

- Models with 24 electrical (RJ45) or optical (SFP) Gigabit Ethernet ports

- 6 10GE SFP+ ports as uplink interfaces

- Compact design with 1U height

- VLAN, QinQ and EAPS support for Metro Ethernet applications

- L2 protocols tunneling for LAN-to-LAN services

- Static IPv4 / IPv6 and dynamic routing through OSPF or BGP

- Two hot-swap slots for full-range AC / DC redundant power supplies with automatic selection
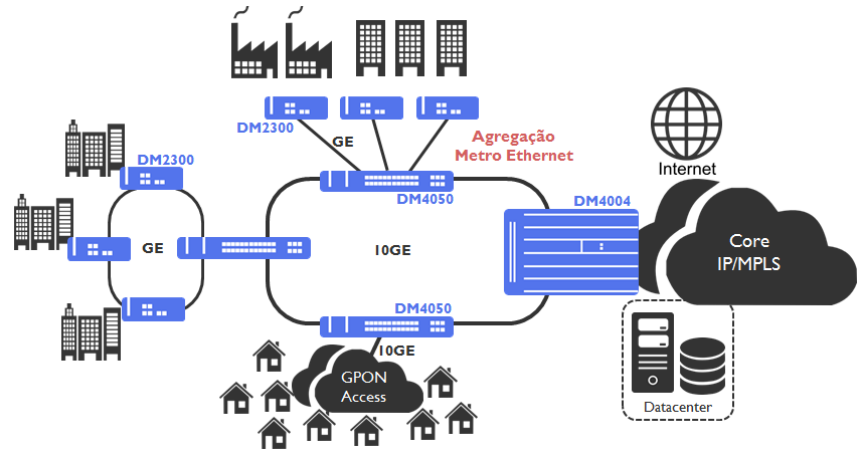
10GE ACCESS AND AGGREGATION

DM4050 switches have six 10GE SFP+ interfaces that can be used for both access links to services greater than 1GE as well as uplink interfaces for 10GE or more than 10GE aggregation rings with Link Aggregation and LACP.
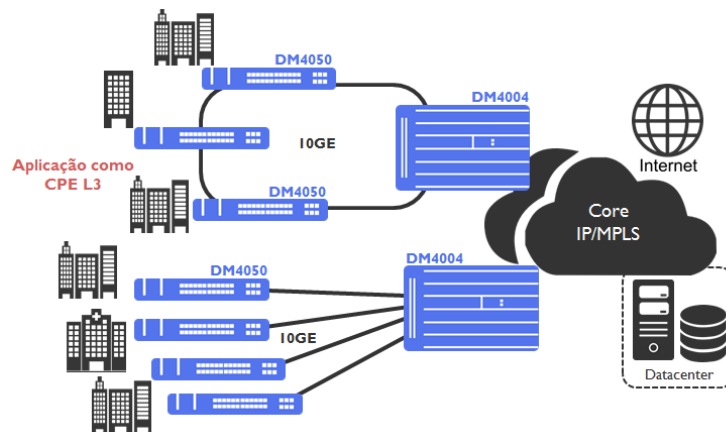
APPLICATIONS

METRO ETHERNET AGGREGATION

Through its GE / 10GE optical interfaces and its L2 and L3 features, DM4050 switches serve high-capacity Metro Ethernet traffic aggregation applications, providing a reliable, high availability solution for corporate or residential services. The product supports the use of ring, star or linear topologies, allowing the network design that best suits the needs of the solution.

IP ACCESS

DM4050 switches support routing functionality and packet forwarding done in HW, ensuring wirespeed operation across all its interfaces for any packet size. Through OSPF and BGP protocols, the ability to create L3 filters and QoS functionality, the switches can also be used as an IP access solution for high value-added enterprise services, ensuring redundancy through features such as LACP, STP or EAPS, depending on the network topology used.

TECHNICAL SPECIFICATIONS

		DM4050 24GX+6XS	DM4050 24GT+6XS
HARDWARE CHARACTERISTICS	Power supply	2 hot swappable slots for PSUs compatible with PSU 85 (100V to 240Vac (50/60Hz) / 48V to 60Vdc)	
	Maximum power consumption	85 W	70 W
	Typical power consumption	80 W	60 W
	Operational temperature (*)	0ºC to 55ºC	
	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 (H x D x W)	43mm x 230mm x 447mm (481mm with brackets)	
	Weight	2,9kg	3,0kg
INTERFACES	10/100/1000Base-T (RJ45)	-	24
	1000Base-X (SFP)	24	-
	10G Base-X (SFP+)	6	
	GE Outband Management (RJ45)	1	
	Console (RJ45)	1	
	USB	1	
	Alarms (**)	1 output and 2 inputs	
PERFORMANCE	Throughput	168 Gbps	
	Packets per second	130 Mpps	

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

(**) Features in roadmap. Please contact Datacom for more information.

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 Products

Resolução 442 (Jul, 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

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.
PSU 85 *PN: 800.0830.xx*	AC/DC full range (100V to 240Vac (50/60Hz) / 48V to 60Vdc) power supply with automatic selection.

ORDERING INFORMATION

Model	Description	
DM4050 24GX+6XS *800.5190.xx*	L2/L3 wirespeed switch with 24 optical Gigabit Ethernet ports (SFP) and 6 optical 10Gisgabit Ethernet ports (SFP+). 1U Metal cabinet for 19-inch racks. Two slots for power supplies. Power supplies and SFPs to be ordered separately.	
DM4050 24GT+6XS *800.5189.xx*	L2/L3 wirespeed switch with 24 electrical Gigabit Ethernet ports (RJ45SFP) and 6 optical 10Gisgabit Ethernet ports (SFP+). 1U Metal cabinet for 19-inch racks. Two slots for power supplies. Power supplies and SFPs to be ordered separately.	

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