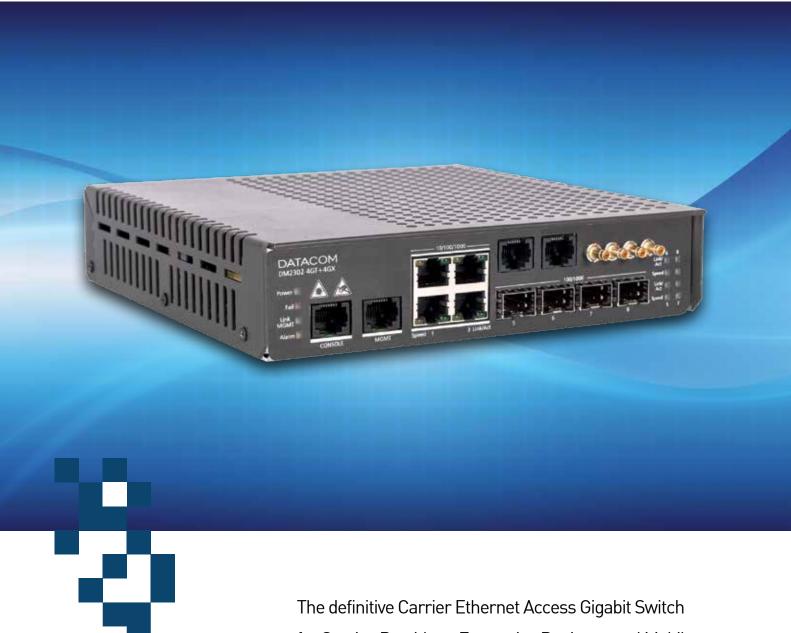
# DATACOM Ethernet Switches DM2300 Carrier Access Switch Series



The definitive Carrier Ethernet Access Gigabit Switch for Service Providers, Enterprise Business and Mobile Backhaul infrastructure. High performance, low power and cost optimized solution for next generation Metro Ethernet Networks and advanced Enterprise switching applications.



DATACOM's full line of Ethernet Switches consists of six distinct product families: DM4000, DM4100, DM3000, DM2300, DM2100 and DM1200E. Each providing unique features such as Layer 2 and Layer 3 with LER/LSR MPLS and physical GigE to 10Gig Electrical and Optical connectivity. The products are suited to provide advanced switching and routing for varying applications ranging from Small Medium Business (SMB) to complex Metro Ethernet Networks.

By offering numerous switch models, in either standalone, stackable or modular platforms, Datacom is able to provide the product that best meets the network infrastructure requirement.

# DM2300 Family

The DM2300 product line has four different versions of a 1U fanless compact metal enclosure Gigabit Carrier Ethernet and Demarcation Switch with an internal full-range and automatic selection AC/DC power supply. Two devices can be installed side-by-side on a 19-inch shelf.

All versions of DM2300 family provide 4 Gigabit Optical SFP and 4 Gigabit RJ Copper ports, and comprehensive support for Layer 2 wire speed switching, OAM, port and service protection, QoS and RFC2544 traffic generation for service activation test.

Besides having an extensive Layer 2 feature set, the DM2300 family provides additional support for SyncE/IEEE1588v2 with external synchronization interfaces, additional 8 E1 ports with SAToP/CESoP, or a combination of both inside a single box.

Complying with all major MEF CE 2.0 recommendations, the DM2300 family provides standardized, manageable, scalable and reliable Ethernet Services. E-Line, E-LAN, E-Tree and E-Access are completely supported.

## **General Features**

#### LAYER 2

- Wire speed L2 packet switching and MAC learning performed at hardware level.
- L2CP Tunneling.
- 8k MAC Address Table.

#### VLANs

- Up to 4096 simultaneous VLANs based on IEEE 802.1Q.
- IEEE 802.1ad Provider Bridge (native or translated VLAN).
- VLAN Translation.
- Private static VLAN.

#### MANAGEMENT

- IPv4 and IPv6 management.
- Switch access control with definition of which IP addresses may access the equipment and through which protocols (such as SNMP, HTTP, Telnet, SSH).
- Easy to use and comprehensive Command Line Interface (CLI).
- HTTPS.
- Telnet, SSH and Web Interface.
- System Syslog.
- SNMP v1, v2c, v3 Agent.
- RMON Group 1, 2, 3, and 9.
- LLDP.

#### PROTECTION

- Link Aggregation (Static and LACP).
- ITU-T G.8032.
- STP, RSTP and MSTP.

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- Embedded RFC2544 traffic generator for Service Activation Test.
- Link OAM based on IEEE 802.3ah.
- CFM OAM based on IEEE 802.1ag with Continuity Check messages up to 3.3 ms at hardware level.
- ITU-T Y.1731 Performance Monitoring with Delay and Loss Measurements implemented at hardware level with high accuracy.
- Up and Down MEP support.

#### QoS

- Traffic manager with thousands of gueues flexibly assigned to ports, services and CoS.
- 8 Mbit of packet buffer.
- Packet classification based on IEEE 802.1p, IP precedence or DSCP field, TCP and UDP ports among others.
- Traffic Policing with 33kbit/s granularity for CIR and EIR parameters.
- Storm Control.
- Random Early Discard (RED) and Strict Priority (SP) schemes.

#### SECURITY

- RADIUS and TACACS+ Accounting.
- DoS prevention.
- MAC Address Learning Limit.
- Access Control List (ACLs) entries check performed at hardware level.

#### TDM CIRCUIT EMULATION<sup>1</sup>

- SAToP (RFC 4553).
- CESoP (RFC 5086).
- Adaptive Clock Recovery (ACR).
- MEF 8 (L2) and UDP/IPv4 encapsulation modes.
- BITS input port (2.048kHz or 2.048kbit/s).

#### SYNCHRONIZATION<sup>2</sup>

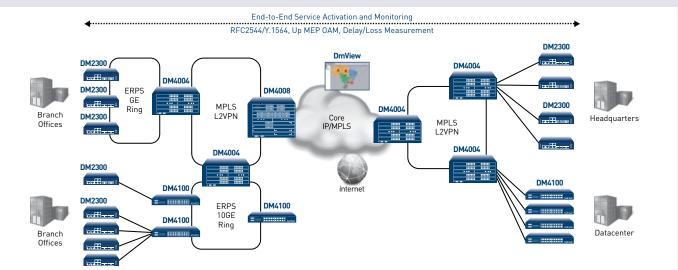
- IEEE1588v2 Ordinary Clock Master/Slave and Transparent Clock with 1-step and 2-step support.
- Synchronous Ethernet (SyncE) with ESMC on all Ethernet Ports (ITU-T G.8261).
- PTP timestamping at hardware level.
- BITS input and output ports (2.048kHz or 2.048kbit/s).
- 10 MHz input and output ports.
- 1 PPS input and output ports.
- Stratum-3 internal reference OCXO.
- Telecom Profile Support for Mobile Backhaul deployments (ITU-T G.8265.1 and G.8275.1).
- NTPv4.

### Models

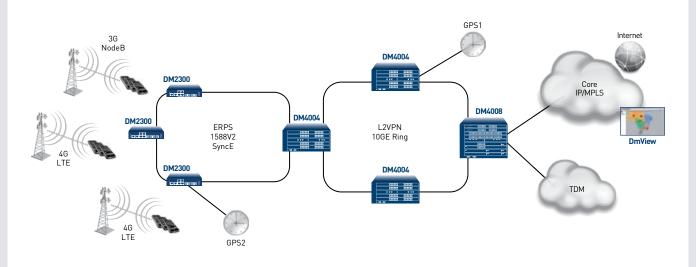
	DM2301 4GT+4GX	DM2301 4GT+4GX+8E1	DM2302 4GT+4GX	DM2302 4GT+4GX+8E1
NNI Ports (100Base-FX/1000Base-X SFP)	4	4	4	4
UNI Ports (10/100/1000Base-T RJ45)	4	4	4	4
TDM Ports (G.703 E1 RJ45)	-	8	-	8
Synchronization Ports	-	BITS IN	BITS IN/OUT, ToD, 10MHz, 1 PPS	BITS IN/OUT, ToD, 10MHz, 1 PPS
Synchronization Protocols	-	ACR	IEEE1588v2, SyncE	ACR, IEEE1588v2, SyncE
Power Supply	Single internal AC/DC with automatic selection	Single internal AC/DC with automatic selection	Single internal AC/DC with automatic selection	Single internal AC/DC with automatic selection

## **Applications**

### ENTERPRISE APPLICATIONS WITH PROACTIVE SERVICE MONITORING



### **MOBILE BACKHAUL**





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