## DATACOM

# DM4250 10 Gigabit Ethernet Aggregation Switch



Standalone Ethernet Switch based on the DmOS network operating system, with 10GE and 40GE optical interfaces for high capacity metro ethernet aggregation applications.



Datacom Ethernet Switches consist of different product families that compose a complete portfolio for applications from access to core of the networking infrastructure. The product families are DM4000, DM4100, DM4050, DM4170 and DM4250 as core and aggregation ethernet switches, DM2100, DM2300 and DM4370 as ethernet demarcation switches and DM1100E/DM1200E as enterprise LAN switches.



### DM4250 – 10GE Aggregation Switch

The DM4250 Ethernet Switch is a fixed configuration high performance switch ready for the growing migration of the networking services towards 10 Gbps. The switch is based on the Datacom's modular network operating system DmOS, with support for a complete L2 and IP feature set, turning it into the perfect fit for enterprise services aggregation, high capacity mobile backhaul or ultra-broadband access network aggregation. The switch contains twenty-four optical SFP+ based 10GE interfaces and two optical QSFP+ based 40GE interfaces.

The DM4250 switch has 1U height and is ready for standard 19 inches rack installation. The product contains two hot swappable slots for redundant AC or DC universal power source units, assuring high availability services and operation.

#### Key Features

- Wire Speed, with L2/L3, filtering and QoS done on hardware level
- IEEE802.1Q VLAN with Q-in-Q and VLAN Translate capabilities
- Link Aggregation and LACP
- Support for ring applications through EAPS or ERPS protocols
- STP/RSTP for L2 loop protection
- L2 Slow Protocol Tunneling (L2CP), allowing LAN-to-LAN transparent applications
- Static Routing and Dynamic Routing through OSPF and BGP protocols
- Virtual IP redundancy through VRRP protocol
- Up to 8 QoS queues per port
- Packet classification by IEEE802.1p, DSCP, Source/Destination Port
- Packet Scheduling through Strict Priority (SP) or Weighted Fair Queuing (WFQ) modes

- Ingress and Egress Rate Limit
- ACL Matches by port, MAC address, IP, DSCP, TCP/UDP
- CLI Management interface through local access or through Telnet/SSH
- TACACS and RADIUS for management access policies
- Alarm interfaces with one output and two inputs
- Packet forwarding tables with 32k
  MACs for L2 and 16k routes for L3

## DmView – Integrated Network Management System

With a friendly graphical user interface and visualization of the equipment in topological maps, DmView offers managing functionalities for Datacom solutions. The management software also allows the equipment visualization and monitoring, allowing identification of operational status and active alarms, as well as the CLI Template that facilitates and accelerates the common configuration operations. DmView can run on highly available server clusters. Another important feature is the support for new DmOS firmware versions without the need to update DmView.

#### Hardware Characteristics

	DM4250 24XS+2QX
10GE Interfaces	24 (SFP+)
40GE Interfaces	2 (QSFP+)
Switch Fabric	640 Gbps
Power Supply	Two redundant hot swappable slots for AC (100-240V) or DC (48-60V) automatic selection PSUs
Power Consumption	80W (typical)
Management Interfaces	GE out-of-band, RS232 Console and USB
Environmental	0 to 55°C operation temperature at 10% to 90% relative humidity
Dimensions	(HxDxW) 44mm x 265mm x 447mm (482mm w/ brackets)

#### Application

#### METRO ETHERNET AGGREGATION

The DM4250 switch, through its 10GE and 40GE optical interfaces and the complete support for L2 switching and IP routing functionalities, can address high capacity metro ethernet applications, offering a reliable and highly available solution for corporate IP access and broadband services. The product support different network topologies like ring or linear, allowing the network design that best fits the service requirements.



