Switches Ethernet DATACOM DM3000 Family



The DM3000 line of switches consists of four models with electrical or optical Gigabit Ethernet and Fast Ethernet interfaces which are able to be applied in applications such as FTTX, LAN and collector rings for Metro Ethernet Networks.



DATACOM offers several option of Ethernet switches models for high performance networks that work at rates up to 10Gbps. The DATACOM switches are capable to be used in applications of Metro Ethernet networks, allowing the construction of redundant rings and the aggregation and collection of access networks for FTTx scenarios. Besides, the DATACOM switches are suitable for Enterprise networks, implementing the functions of Access, Distribution and Core.

The DATACOM line of Ethernet switches consists of four product families: DM4000, DM4100, DM3000 and DM2100.

DM3000 Family

The DM3000 family is made up of four different versions of 1U height, wire speed, standalone switches for 19-inch racks and a full-range hot-swappable AC/DC redundant power supply.

Layer-2 packet switching and Layer-3 routing are the two available options in different models of the DM3000 line.

The different versions support either optical or electric Fast Ethernet and Gigabit Ethernet combo ports.

The switches of the DM3000 family support stacking up to eight units in ring topology for greater protection in case of failure. Each ring is able to be monitored from a single management point.

DM3000 FAMILY VERSIONS

- DM3324F3
- DM3224F3
- DM3324F2
- DM3224F2

General Characteristics of the DM3000

WIRESPEED L2 AND L3

 L2, L3 and MPLS packet switching done at the hardware level. Layer 2/3 protocols are implemented in software in order to assemble the MAC address and IPv4 route tables. QoS features are also executed in hardware.

IP NETWORKS

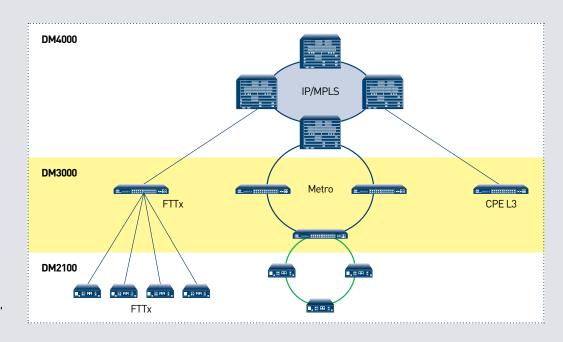
- Static and dynamic routing for IPv4 by means of RIP, OSPF and BGP protocols.
- IP network balancing via ECMP.
- Routing among VLANs with support to 512 VLAN interfaces with IP and 4000 host entrances.
- Multicast routing via PIM protocols in the functions Source Mode (SM) or Source Specific Mode (SSM).
- VRRP for the deployment of L3 networks with high availability.

MANAGEMENT

- Comprehensive centralized SNMP management is available via DmView, DATACOM's full FCAPS management software. DmView allows for multiple user and segmented network management capability.
- Switch access control with definition of which IP addresses may access the equipment and through which protocols (SNMP, HTTP, Telnet, SSH).
- Easy to use and comprehensive Command Line Interface – CLI, internal Web Server, XML interface and SNMP/RMON agent.
- Creation of Access Control Lists (ACLs) in hardware, with multiple comparison and action parameters allowing for the changing, forwarding, discarding or prioritizing of packets without penalizing the equipment CPU.

SOLUTION FOR LAST MILE

The DM3000 line is able to be used in scenarios of access networks with the aggregation of several 100Base-T or 100Base-X ports for terminal switches of Metro Ethernet networks or for FTTx network applications. Working together with the DM4000, DM4100 or DM2100 line of switches, under the DmView management, the DM3000 integrates easily to a complete DATACOM's network solution based in L2, L3 or IP/MPLS technology.



Line

QoS FACILITIES

- Eight queue per port with priority algorithms, set by either fixed priority, or weight, or minimum rate or a combination of these methods.
- Classification by the IEEE 802.1p standard, IP precedence or DSCP fields, TCP and UDP ports, among others, being able to compare up to L7 level data.
- Band control with 64kbit/s granularity in the CIR and PIR definition applied to the input traffic of the ports or to a certain flow of packets by means of filters and counters implemented in hardware.

SECURITY

- Encryption in the communication protocols and manager access control rules
- Local and remote Syslog, user authentication, authorization and accounting RADIUS and TACACS+ (AAA), alarm notification by e-mail, single clock via SNTP, protection against Denial of Service attacks.
- Limitation to the quantity of MAC numbers by port, protection mechanisms on L2 and L3 protocols against network attack and bandwidth limitation for broadcast and multicast traffic and destination lookup failure (DLF).

VLANs

- Up to 4,096 VLANs, outlined by IEEE 802.1Q, provides double tagging functionality (Q-in-Q) allowing the creation of TLS services.
- VLAN definition by protocol, MAC address and IP-Subnet, allowing for overlapping ports on port-based VLANs, apart from dynamic configuration using the GVRP protocol.

PROTECTION MECHANISMS

- Spanning Tree protocols, including RSTP and MSTP.
- EAPS and G.8032 protocols for L2 networks, allowing for recovery time shorter than 50 milliseconds for the protection of Ethernet rings.
- VRRP protocol for deploying L3 redundancy scenarios.
- Backup link for 1:1 protection or aggregated link for 1+1 protection allowing the construction of double approach scenarios.

DM3000

DM3000 Family Models



DM3324F3

Stackable Layer 3 switch with 24 optical Fast Ethernet ports (100Base-FX) and four Gigabit combo ports (1000Base-X or 10/100/1000Base-T).

DM3224F3

Stackable Layer 2 switch with 24 optical Fast Ethernet ports (100Base-FX) and four Gigabit combo ports (1000Base-X or 10/100/1000Base-T).



DM3324F2

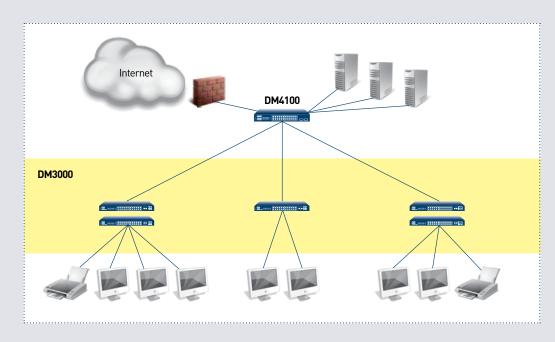
Stackable Layer 3 switch with 24 electrical Fast Ethernet ports (10/100Base-TX) and four Gigabit combo ports (1000Base-X or 10/100/1000Base-T).

DM3224F2

Stackable Layer 2 switch with 24 electrical Fast Ethernet ports (10/100Base-TX) and four Gigabit combo ports (1000Base-X or 10/100/1000Base-T).

SOLUTION FOR ENTERPRISE NETWORK

On Enterprise network environments, the DM3000 line offers an option very attractive for the deployment of LAN networks with the possibility of using up to eight QoS queues. Working on layer 2 or layer 3, the DM3000 offers the possibility of stacking up to eight devices in ring topology using two electrical or optical ports operating at 1Gbps each.



DATACOM

Rua América, 1000 | 92990-000 | Eldorado do Sul | RS | Brazil

+55 51 3933 3000

sales@datacom.ind.br

www.datacom.ind.br