

DATAKOM



DM1105E / DM1205E

GIGABIT ETHERNET SWITCHES

DATASHEET

DM1105E / DM1205E

GIGABIT ETHERNET SWITCHES

MANAGEABLE GIGABIT ETHERNET SWITCHES WITH POE+ SUPPORT AND 10 GIGABIT UPLINK OPTION

The DM1105E and DM1205E switch line is a wire-speed Gigabit Ethernet solution to meet the growing demand for bandwidth in enterprise network applications. Consisting of five fixed-configuration 19" rackmount switches, including models with PoE+ support, they enable low-cost networking with high traffic capacity.

The switches have an internal switching capacity ranging from 52Gbit/s up to 136Gbit/s with all packet switching implemented on hardware at wire-speed, ensuring non-blocking traffic switching. Filtering features also run on hardware, with no impact on CPU or packet forwarding performance.

The switches have a complete IPv4 and IPv6 management interface. They have a CLI configuration interface with automatic syntax assistance, accessible through SSH, Telnet and RS-232 Console. An internal Web Server with SNMP agent is also available.

To ensure network security, the switches allow for the creation of a trusted management structure through RADIUS authentication. They also support protection of Denial of Service (DoS / DDoS) attacks and port and MAC Address authentication according to IEEE802.1x. Protection mechanisms against broadcast and multicast attacks are also available.

DM1105E and DM1205E switches support a number of advanced features such as simultaneous VLAN configurations, Link Aggregation, and Spanning Tree (STP, MSTP, and RSTP) network redundancy and protection protocols. For multicast networks, IGMP Snooping functionality is supported.

For network optimization, the switches support 8 CoS queues per port with IEEE802.1p traffic classification and multiple matches using ACLs, allowing bandwidth limiting and traffic conformation.

- Models with switching capacity from 52Gbps up to 136Gbps
- GE (SFP) or 10GE (SFP+) uplinks
- Models with 24 or 48 10/100/1000Base-T RJ45 ports
- MAC table with 8k addresses on DM1105E and 16k addresses on DM1205E
- Manageable Switches
- VLAN, QoS, STP
- Internal power supply
- Models with PoE+ option

DM1105E – MAIN FEATURES

- 24 10/100/1000Mbps RJ45 ports with auto negotiation support
- 2 1000Mbps SFP ports
- Store-and-forward with up to 52Gbps switching capacity
- IEEE 802.3x flow control and backpressure
- Automatic MAC addresses learning and aging
- SNMPv1, v2 and v3, RMON and TELNET
- IEEE 802.1p priority queues
- QoS, Port Mirroring, Link Aggregation and Storm Control
- Reset button
- Power, link, activity and communication rate indicators
- WEB interface management
- Internal power supply
- PoE+ model with internal power supply with an additional 370W
- 500MHZ CPU with 128MB RAM memory
- RS232 serial management interface, RJ45 connector

DM1105E – TECHNICAL SPECIFICATIONS

Model	DM1105E 24GT+2GX	DM1105E 24GP+2GX
STANDARDS	IEEE 802.3, IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x, IEEE 802.3z, IEEE 802.3ad, IEEE 802.3ac, IEEE 802.1ax, IEEE 802.1p, IEEE 802.1q, IEEE 802.3at, IEEE 802.3af, ANATEL, RoHS Compliant	
CABLING	10BASE-T UTP cat 3,4,5 (max 100m) 100BASE-Tx UTP cat 5,5e (max 100m) 1000BASE-T UTP cat 5e,6 (max 100m)	
OPTICAL INTERFACES	2x 1000Base-X SFP (1000Base-SX / 1000Base-LX / 1000Base-T)	
ELECTRICAL INTERFACES	24 x 10/100/1000Mbps with auto negotiation and auto MDIX Half and full duplex support	
PoE+	-	IEEE 802.3at/af
SWITCHING	Store-and-forward	
SWITCHING RATE	52Gbps	
MAC ADDRESS LEARNING	8K	
PACKET FORWARDING RATE	38,69Mpps	
JUMBO FRAME	9200 Bytes	
LIGHT INDICATORS	Power (Green)	
	Link/Activity/Speed (10/100Mbps Orange,1000Mbps Green), PoE (when available)	
POWER SUPPLY	100~240VAC, 50/60HZ with automatic selection	
DIMENSIONS [WxDxH]	440x208x44,5mm	440x208x44,5mm
ENVIRONMENTAL CONDITIONS	Operational temperature 0°C to 45°C, relative humidity 10% to 90% non-condensed Storage temperature -40°C to 70°C, relative humidity 5% to 90% non-condensed	

DM1105E – FIRMWARE

Model	DM1105E
MANAGEMENT	TELNET, SSH, WEB, NTP, HTTP/HTTPS, FTP and TFTP SNMPv1, v2 and v3, RMON, CONSOLE Configuration management via <i>running-config</i> and <i>startup-config</i> Local and remote Syslog CPU usage monitoring through SNMP
PORTS	Monitoring, Rate-limit MAC Filtering, LLDP Link Aggregation of up to 8 ports
VLAN and MAC table	Port based VLAN, Private VLAN, Voice VLAN, MAC VLAN VLAN 802.1q 4k VLANs
STP	IEEE802.1w Rapid Spanning Tree Protocol (RSTP) IEEE802.1d Spanning Tree Protocol (STP) IEEE802.1s Multiple Spanning Tree Protocol (MSTP) BPDU Filter, BPDU Guard and Portfast support
QoS	8 queues, SP, RR, WRR and WFQ scheduling
DHCP	DHCP Relay on multiple VLANs DHCP Server DHCP Snooping
L3 FUNCTIONALITIES	Port filtering, ping, traceroute
MULTICAST	IGMP Snooping (v1 and v2) according to RFC1112 and RFC2236 256 multicast groups
NETWORK SECURITY	ACL: Layers L2 / L3 / L4; Packet classification based on: MAC address, IP address, TCP / UDP port, Protocol type; RADIUS, TACACS+ authentication DoS attack protection IEEE 802.1x (dot1x) Storm-Control Guest VLAN
PoE+	Status, power management, prioritization
TRAFFIC MONITORING	Port mirroring Packet counters support on all interfaces, with SNMP (IF-MIB) monitoring

DM1205E – MAIN FEATURES

- 48 10/100/1000Mbps RJ45 ports with auto negotiation
- 2 1G/10Gbps SFP+ ports or 4 1Gbps SFP ports
- Store-and-forward with up to 136Gbps switching capacity
- High performance Cortex-A9 processor
- IEEE 802.3x flow control and backpressure
- Automatic MAC addresses learning and aging
- SNMPv1 and v2, RMON and TELNET
- IEEE 802.1p priority queues
- Low energy consumption and energy saving EEE
- QoS, Port Mirroring, Link Aggregation and Storm Control
- Reset button
- Power, link, activity and communication rate indicators
- WEB interface management
- Internal power supply
- PoE+ model with internal power supply
- CPU de 600Hz CPU with 512MB RAM
- RS232 serial management interface, RJ45 connector






DM1205E – TECHNICAL SPECIFICATIONS

Model	DM1205E 48GT+2XS	DM1205E 48GP+2XS	DM1205E 48GT+4GX
STANDARDS	IEEE 802.3, IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3az, IEEE 802.3ae, IEEE 802.3, IEEE 802.3z, IEEE 802.3ad, IEEE 802.1p, IEEE 802.1q, IEEE 802.3at, IEEE 802.3af, RoHS Compliant		
CABLING	10BASE-T UTP cat 3,4,5 (max 100m) 100BASE-Tx UTP cat 5,5e (max 100m) 1000BASE-T UTP cat 5e,6 (max 100m)		
OPTICAL INTERFACES	2x 1000/10GBase-X SFP+	2x 1000/10GBase-X SFP+	4x 1000Base-X SFP (1000Base-SX / 1000Base-LX / 1000Base-T)
ELECTRICAL INTERFACES	48x 10/100/1000Mbps with auto negotiation and auto MDIX	48x 10/100/1000Mbps with auto negotiation and auto MDIX and PoE+ support	48x 10/100/1000Mbps with auto negotiation and auto MDIX
PoE+	-	IEEE 802.3at/af (370W embedded PSU)	-
SWITCHING	Store-and-forward		
SWITCHING RATE	136Gbps		104Gbps
MAC ADDRESS LEARNING	16K		
PACKET FORWARDING RATE	101,184Mpps		77,376Mpps
JUMBO FRAME	12Kbytes		
LIGHT INDICATORS	Power (Green), System (Green)		
	Link/Activity/Speed (10/100Mbps Orange,1000Mbps Green), PoE (when available)		
POWER SUPPLY	100~240VAC, 50/60HZ with automatic selection		
DIMENSIONS [WxDxH]	440x330x44,5mm	440x600x44,5mm	440x330x44,5mm
ENVIRONMENTAL CONDITIONS	Operational temperature 0°C to 45°C, relative humidity 10% to 90% non-condensed Storage temperature -40°C to 70°C, relative humidity 5% to 90% non-condensed		

DM1205E – FIRMWARE

Model	DM1205E
MANAGEMENT	<p>TELNET, SSH, WEB, SNMP, FTP and TFTP</p> <p>SNMPv1, v2 and v3, RMON, CONSOLE</p> <p>RFC1213 – MIB II</p> <p>4 Management access levels: guest, user, operator and manager</p> <p>Configuration management via <i>running-config</i> and <i>startup-config</i></p> <p>Management VLAN</p> <p>Local and remote Syslog</p>
PORTS	<p>Port isolation, loop detection</p> <p>Rate-limit</p> <p>LLDP</p> <p>Port Channel</p> <p>Jumbo Frames</p> <p>Automatic half/full duplex detection on all ports</p>
VLAN and MAC table	<p>802.1q tunnels</p> <p>VLAN translate</p> <p>Automatic learning and aging</p> <p>MAC filtering, Static MAC Assignment</p> <p>GVRP</p> <p>Up to 4k VLANs support</p> <p>Port based VLAN , Private VLAN</p>
STP	<p>IEEE802.1w Rapid Spanning Tree Protocol (RSTP)</p> <p>IEEE802.1d Spanning Tree Protocol (STP)</p> <p>IEEE802.1s Multiple Spanning Tree Protocol (MSTP)</p> <p>BPDU Guard</p>
QOS	<p>WRR, WDRR, WFQ, SP+WRR, SP+WFQ</p> <p>8 queues</p> <p>Packet buffer of 1,5Mbytes</p> <p>64kbit/s granularity for input or output traffic</p> <p>Prioritization using 802.1p or DSCP</p>
L3 ROUTING	<p>Routing between VLANs of up to 128 interfaces</p> <p>IPv4 and IPv6</p> <p>L3 packet forwarding</p> <p>Routing table with up to 64 IPv4 routes and 64 IPv6 routes</p> <p>ARP</p> <p>RFC2461 - Neighbor Discovery for IPv6</p> <p>RFC2462 - IPv6 Stateless Address Autoconfiguration</p>
DHCP	DHCP Relay, DHCP Server, DHCP Snooping
MULTICAST	<p>IGMP Snooping (v1 and v2) according to RFC1112 and RFC2236</p> <p>IPv6 multicast, MLD snooping</p>
NETWORK SECURITY	<p>RADIUS 802.1x authentication</p> <p>DoS attack protection (source MAC same as destination MAC, source IP same as destination IP, source UDP port same as destination, source TCP port same as destination, maximum ICMPv4 payload size, max ICMPv6 payload size, Fragmented ICMP packets, among others)</p> <p>ARP Spoofing and ARP Flooding protection</p>
PoE+	Status, power management, prioritization
TRAFFIC MONITORING	Port mirroring, sFlow

MODELS

Model	Description	
DM1105E 24GT+2GX	Switch with 24 electrical Gigabit Ethernet ports and two optical Gigabit Ethernet uplink ports on SFP connectors. SFPs to be ordered separately.	
DM1105E 24GP+2GX	Switch with 24 electrical Gigabit Ethernet ports with PoE + support and two optical Gigabit Ethernet uplink ports on SFP connectors. SFPs to be ordered separately.	
DM1205E 48GT+2XS	Switch with 48 electric Gigabit Ethernet ports and two 10 Gigabit Ethernet optical uplink ports on SFP+ connectors. SFP+ to be ordered separately.	
DM1205E 48GP+2XS	Switch with 48 electrical Gigabit Ethernet ports with PoE+ support and two 10 Gigabit Ethernet optical uplink ports on SFP+ connectors. SFP+ to be ordered separately.	
DM1205E 48GT+4GX	Switch with 48 electric Gigabit Ethernet ports and four optical Gigabit Ethernet uplink ports on SFP connectors. SFPs to be ordered separately.	

DATAKOM

Rua América, 1000 | 92990-000 | Eldorado do Sul | RS | Brasil
+55 51 3933 3000
sales@datacom.com.br