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Product: DRAGON MACH4000-48G+4X-L3A-MR



Full Gigabit Ethernet Backbone Layer-3 Switch with up to 48x GE + 4x 2.5/10 GE ports

Product Description

Full Gigabit Ethernet Backbone Switch with up to 48x GE + 4x 2.5/10 GE ports, modular design, fan unit installed, blind panels for line card and power supply slots included, advanced Layer 3 HiOS features, multicast routing

Technical Specifications

Product description

Type:	DRAGON MACH4000-48G+4X-L3A-MR
Name:	DRAGON MACH4000-48G+4X-L3A-MR
Description:	Full Gigabit Ethernet Backbone Switch with internal redundant power supply and up to 48x GE + 4x 2.5/10 GE ports, modular design and advanced Layer 3 HiOS features, multicast routing
Software Version:	HiOS 09.0.11
Part Number:	942154003
Port Type and Quantity:	Ports in total up to 52, Basic unit 4 fixed ports: 4x 1/2.5/10 GE SFP+, Modular: 48x FE/GE ports expandable with four media module slots, 12x FE/GE ports per module

More Interfaces

V.24 interface:	1 x RJ45 socket
SD-card slot:	1 x to connect auto-configuration adapter ACA31 (SD)
USB interface:	1 x USB to connect auto-configuration adapter ACA22-USB

Power requirements

Operating Voltage:	PSU unit input: 100 - 240 V AC; switch can be operated with either 1 or 2 field-replaceable PSU units (to be ordered separately)
Power Consumption:	80 W (incl. SFP transceivers + 1 PSU + Fan module)

Software

Switching:	Independent VLAN Learning, Fast Aging, Static Unicast/Multicast Address Entries, QoS / Port Prioritization (802.1D/p), TOS/DSCP Prioritization, Interface Trust Mode, CoS Queue Management, IP Ingress DiffServ Classification and Policing, IP Egress DiffServ Classification and Policing, Queue-Shaping / Max. Queue Bandwidth, Flow Control (802.3X), Egress Interface Shaping, Ingress Storm Protection, Jumbo Frames, VLAN (802.1Q), Protocol-based VLAN, VLAN Unaware Mode, GARP VLAN Registration Protocol (GVRP), Voice VLAN, MAC-based VLAN, IP subnet-based VLAN, GARP Multicast Registration Protocol (GMRP), IGMP Snooping/Querier per VLAN (v1/v2/v3), Unknown Multicast Filtering, Multiple VLAN Registration Protocol (MVRP), Multiple MAC Registration Protocol (MMRP), Multiple Registration Protocol (MRP), Layer 2 Loop Protection
Redundancy:	HIPER-Ring (Ring Switch), HIPER-Ring over Link Aggregation, Link Aggregation with LACP, Link Backup, Media Redundancy Protocol (MRP) (IEC62439-2) - Redundancy Manager, Media Redundancy Protocol (MRP) (IEC62439-2) - Redundancy Client, MRP over Link Aggregation, Redundant Network Coupling, Sub Ring Manager, RSTP 802.1D-2004 (IEC62439-1), MSTP (802.1Q), RSTP Guards, VRRP, VRRP Tracking, HiVRRP (VRRP enhancements)
Management:	Dual Software Image Support, TFTP, SFTP, SCP, LLDP (802.1AB), LLDP-MED, SSHv2, V.24, HTTP, HTTPS, Traps, SNMP v1/v2/v3, Telnet, DNS Client, OPC-UA Server
Diagnostics:	Management Address Conflict Detection, MAC Notification, Signal Contact, Device Status Indication, TCPDump, LEDs, Syslog, Persistent Logging on ACA, Email Notification, Port Monitoring with Auto-Disable, Link Flap Detection, Overload Detection, Duplex Mismatch Detection, Link Speed and Duplex Monitoring, RMON (1,2,3,9), Port Mirroring 1:1, Port Mirroring 8:1, Port Mirroring N:1, RSPAN, SFLOW, VLAN Mirroring, Port Mirroring N:2, System Information, Self-Tests on Cold Start, Copper Cable Test, SFP Management, Configuration Check Dialog, Switch Dump, Snapshot Configuration Feature
Configuration:	Automatic Configuration Undo (roll-back), Configuration Fingerprint, Text-based Configuration File (XML), BOOTP/DHCP Client with Auto-Configuration, DHCP Server: per Port, DHCP Server: Pools per VLAN, AutoConfiguration Adapter ACA31 (SD card), AutoConfiguration Adapter ACA21/22 (USB), HiDiscovery, DHCP Relay with Option 82, Command Line Interface (CLI), CLI Scripting, Full-featured MIB Support, Web-based Management, Context-sensitive Help
Security:	MAC-based Port Security, Port-based Access Control with 802.1X, Guest/unauthenticated VLAN, Integrated Authentication Server (IAS), RADIUS VLAN Assignment, RADIUS Policy Assignment, Multi-Client Authentication per Port, MAC Authentication Bypass, DHCP Snooping, IP Source Guard, Dynamic ARP Inspection, Denial-of-Service Prevention, LDAP, Ingress MAC-based ACL, Egress MAC-based ACL, Ingress IPv4-based ACL, Egress IPv4-based ACL, Time-based ACL, VLAN-based ACL, Ingress VLAN-based ACL, Egress VLAN-based ACL, ACL Flow-based Limiting, Access to Management restricted by VLAN, Device Security Indication, Audit Trail, CLI Logging, HTTPS Certificate Management, Restricted Management Access, Appropriate Use Banner, Configurable Password Policy, Configurable Number of Login Attempts, SNMP Logging, Multiple Privilege Levels, Local User Management, Remote Authentication via RADIUS, User Account Locking, Password change on first login
Time synchronisation:	PTPv2 Transparent Clock two-step, PTPv2 Boundary Clock, Buffered Real Time Clock, SNTP Client, SNTP Server
Miscellaneous:	Manual Cable Crossing, Port Power Down

Routing:	IP/UDP Helper, Full Wire-Speed Routing, Port-based Router Interfaces, VLAN-based Router Interfaces, Loopback Interface, ICMP Filter, Net-directed Broadcasts, OSPFv2, RIP v1/v2, ICMP Router Discovery (IRDP), Equal Cost Multiple Path (ECMP), Static Unicast Routing, Proxy ARP, Static Route Tracking, IGMP v1/v2/v3, IGMP Proxy (Multicast Routing), DVMRP, PIM-DM (RFC3973), PIM-SM / SSM (RFC4601)
Multicast routing:	DVMRP, PIM-DM (RFC3973), PIM-SM / SSM (RFC4601)

Ambient conditions

MTBF (Telcordia SR-332 Issue 3) @ 25°C:	1 281 583 h
Operating temperature:	0-+60 °C
Minimum Storage Temperature:	-40-+70 °C
Relative humidity (non-condensing):	10-95 %
Protective paint on PCB:	Yes (conformal coating)

Mechanical construction

Dimensions (WxHxD):	480 mm x 88 mm x 445 mm
Mount Type:	19" control cabinet
IP Protection Rating:	IP20

Approvals

Basis Standard:	C-Tick, CE, EN61131
Safety of industrial control equipment:	cUL61010-1/-2-201, EN60950-1
Transportation:	EN 50121-4

Reliability

Guarantee:	60 months (please refer to the "terms of guarantee or detailed information)

Scope of delivery and accessories

Accessories to Order Separately:	Media Modules (D4K-12xxx), Power Supply Unit (D4K-PSU-300W-HV), Power Cord (e.g. Power Cord Europe – 942 271-001), SFP Transceiver, ACA22-USB (EEC), ACA31
Scope of delivery:	Device, Safety and general information sheet, 3-pin terminal block for signal contact, Fan module D4K-AIR, 4 × Cover panel for media module slot, Cover panel for power supply module slot

Further Instructions

Product Documentation:	https://www.doc.hirschmann.com
Certificates:	https://www.doc.hirschmann.com/certificates.html
Software Download:	https://www.doc.hirschmann.com/releasemap.html

History

Update and Revision:	Revision Number: 0.210 Revision Date: 03-03-2026

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