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

Industrial Ethernet:Backbone Switches:DRAGON MACH4000:Chassis:DRAGON MACH4000-48G+4X-L3A-MR	
http://dev-catalog.beldensolutions.com/link/57078-24455-504081-503772-504853-504080/en/conf/uistate	
Name	DRAGON MACH4000-48G+4X-L3A-MR
	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
Delivery informations	
Availability	available
Product description	
Type	DRAGON MACH4000-48G+4X-L3A-MR
Order No.	942 154-003
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
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
Number of fiber ports	Up to 52 fiber ports: 48 x GE/FE plus 4 x 2.5GE/10GE
More Interfaces	
V.24 interface	1 x RJ45 socket
USB interface	1 x to connect auto-configuration adapter ACA22 (USB)
SD-card slot	1 x to connect auto-configuration adapter ACA31 (SD)
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 seperately)
Power consumption	80 W (incl. SFP transceivers + 1 PSU + Fan module)
Mechanical construction	
Dimensions (W x H x D)	480 mm x 88 mm x 445 mm
Protection class	IP20
Mounting	19" control cabinet
Software	
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
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
Redundancy functions	HIPER-Ring (Ring Switch), HIPER-Ring over Link Aggregation, Link Aggregation with LACP, Link Backup, Media Redundancy Protocol (MRP) (IEC62439-2), 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)
Industrial Profiles	EtherNet/IP Protocol, IEC61850 Protocol (MMS Server, Switch Model), ModbusTCP, PROFINET IO Protocol
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

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)
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	
Operating temperature	0 ºC ... 60 ºC
Storage/transport temperature	-40 ºC ... 70 ºC
Relative humidity (non-condensing)	10 % ... 95 %
Approvals	
Basis Standard	C-Tick, CE, EN61131
Safety of industrial control equipment	cUL61010-1/-2-201 (pending) ; EN60950-1
Transportation	EN 50121-4
Scope of delivery and accessories	
Scope of delivery	Device, Fan module D4K-AIR, 1x D4K-PSU-PANEL, 4x D4K-LC-PANEL, General safety instruction
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

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