



PowerLION-24 TP

Industrial Networking:Industrial Ethernet:LION Control Room Switch:Chassis

Product description	
Description	Gigabit ETHERNET managed switch, store-and-forward forwarding scheme
Port type and quantity	24 x 10/100/1000BASE-T ports (RJ-45 connectors), 4 of which are Gigabit ETHERNET combo ports (RJ-45/SFP), with one optional 10GE uplink module, Layer 3
Type	PowerLION-24 TP
Order No.	943 886-001
More Interfaces	
V.24 interface	outband management connection via V.24 (DB9 RS-232 console interface)
Network size - length of cable	
Twisted pair (TP)	0 - 100 m
Network size - cascading	
Line - / star topology	any
Power requirements	
Operating voltage	min. 100 V, max. 240 V, input frequency: 47 to 63 Hz
Current consumption	max. 140 W
Service	
	SNMP v1 and SNMP v2 management functions, integration in HiVision RMON (groups 1,2,3 and 9) web-based management TELNET console interface BOOTP and DHCP for IP address assignment firmware upgraded by TFTP file transfer protocol through the Ethernet network dual firmware images configuration file upload/download by TFTP protocol two or more Configuration files system error log (syslog)
	IEEE 802.1Q GVRP protocol for automatic VLAN registration and dynamic VLAN management
Security	RADIUS client TACACS+ client HTTPs/SSL Secure Shell (SSH, Secure Telnet) Access Control IEEE 802.1x port based security L2/L3/L4Traffic ClassIPv4 routing CoS by IEEE 802.1p 4 priority queues control WRR for priority queues Strict scheduling for priority queue Rate Limiting Random Early Detection (RED)

Other services	auto-sensing, auto-negotiation on all 10/100/1000BASE-T ports up to 16 kByte memory for MAC address entries flow control mechanism: backpressure for half duplex; full duplex mode port mirroring IGMP snooping broadcast storm control QoS: DiffServ, Traffic and Bandwidth Management, 8-level priority in switching stacking: stacks up to 10 units
Layer 3	IPv4 routing at wire speed Static IP routes RIP I and RIP II OSPF routing IP Multicast Routing: DVMRP, PIM-DM IP Redundancy - VRRP
Redundancy	
Redundancy functions	IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree IEEE 802.1s Multiple Spanning Tree link aggregation: - up to 8 ports in one trunk - up to 4 trunk groups - 802.3ad (LACP) - Ether-channel(static trunk)
Ambient conditions	
Operating temperature	0 °C to +40 °C
Storage/transport temperature	-40 °C to +70 °C
Relative humidity (non-condensing)	10% to 95%
MTBF	19.8 years
Mechanical construction	
Dimensions (W x H x D)	440 mm x 44 mm x 410 mm
Mounting	19" cabinet or table unit
Protection class	IP 20
Scope of delivery and accessories	
Scope of delivery	device, AC power cord, serial cable, mounting brackets, manual
Accessories to order separately	SFP transceivers: M-SFP-SX/LC (943 014-001), M-SFP-LX/LC (943 015-001), M-SFP-LH/LC (943 042-001) and M-SFP-LH+/LC (943 049-001) 10GE uplink: PowerLION-XM-10G (943 886-201), XENPAK-10G-LR (943 886-901) Stack cable: PowerLION-XM-C30 (943 886-401), PowerLION-XM-C130 (943 886-501)