

MACH4000 Gigabit Backbone Layer 2/3 Rack-Mount Switches



Fast Ethernet Ports, Gigabit Ethernet Uplink Ports, and 10 Gigabit Uplink Ports

The MACH4000 series of high density managed switches is capable of providing as many as 48 Gigabit ports and 3 10-Gigabit ports. Each model comes standard with over 8–16 ports and can be configured with as many as 32 additional ports. Choose from 5 MACH4000 models that allow either 2 or 4 hot-swappable media modules.

NOTE: A fan module is included in each chassis. For a complete switch, please be sure to specify media modules and power supply separately.



Technical Information

Product Description	
Type	MACH4000 Series
Switching/Routing	Software Version Layer 2 or 3
Available Ports	8 to 51
Construction	
Mounting	19" Control Cabinet
Protection Class	IP20
Dimensions (WxHxD)	480 x 88 x 435 mm
Weight	7.5 kg
Ambient Conditions	
Operating Temperature	0°C to +60°C
Storage/Transport Temperature	-25°C to +70°C
Relative Humidity (non-condensing)	10% to 95%
Conformal Coating	n/a
Interfaces	
V.24 Interface	1 x RJ11 Socket
USB Interface	1 x USB (ACA21-USB Adapter)
Power Requirements	
Operating Voltage	24 V DC or 48 V DC or 110-240 V AC (variant applicable)
PoE (802.3af) Ports Supported	Yes (variant applicable)
PoE Plus (802.3at) Ports Supported	n/a
Regulatory Approvals	
Safety of Industrial Control Equipment	cUL508
Hazardous Locations	n/a
Germanischer Lloyd	Germanischer Lloyd
Transportation	n/a
Railway (norm)	n/a
Substation	n/a
Reliability	
MTBF Range	11.1 to 18.9 years
Warranty	5 years standard

NOTE: These are the prominent technical specifications. For complete technical specifications visit: www.hirschmann.com







MACH4000 Gigabit Backbone Layer 2/3 Rack-Mount Switch Configurations

Fast Ethernet Ports, Gigabit Ethernet Uplink Ports, and 10 Gigabit Uplink Ports

MACH4000 – High Density Layer 2/3 Gigabit Backbone Switch Chassis			
Part No.	Order No.	Layer/Software	Description
MACH4002-24G-L2P	943 916-101	Layer 2, Professional Management	Fixed ports: 8 x Gigabit Ethernet combo ports* (SFP dual speed socket or TP 10/100/1000 Mbit/s)
MACH4002-24G-L3E	943 916-201	Layer 3, Enhanced Management	Media modules: 2 x sockets (8 ports max each) for total 16 ports 10/100/1000 Mbit/s (Media modules sold separately – see Media modules below. For software functionality – see page 43)
MACH4002-24G-L3P	943 916-301	Layer 3, Professional Management	
MACH4002-24G+3X-L2P	943 915-101	Layer 2, Professional Management	Fixed ports: 3 x 10Gigabit Ethernet XFP socket and 8 Gigabit Ethernet ports, TP/RJ45 10/100/1000 Mbit/s
MACH4002-24G+3X-L3E	943 915-201	Layer 3, Enhanced Management	Media modules: 2 x sockets (8 ports max each) for total 16 ports 10/100/1000 Mbit/s (Media modules sold separately – see Media modules below. For software functionality – see page 43)
MACH4002-24G+3X-L3P	943 915-301	Layer 3, Professional Management	
MACH4002-48G-L2P	943 911-101	Layer 2, Professional Management	Fixed ports: 16 Gigabit Ethernet (8 Gigabit Ethernet combo ports* 100/1000 Mbit/s, SFP dual speed socket or 10/100/1000 Mbit/s + 8 Gigabit 10/100/1000 Mbit/s RJ45)
MACH4002-48G-L3E	943 911-201	Layer 3, Enhanced Management	Media modules: Four sockets (8 ports max each) for total 32 ports 10/100/1000 Mbit/s (Media modules sold separately – see Media modules below. For software functionality – see page 43)
MACH4002-48G-L3P	943 911-301	Layer 3, Professional Management	
MACH4002-48G+3X-L2P	943 878-101	Layer 2, Professional Management	Fixed ports: Three 10Gigabit Ethernet XFP sockets and 16 Gigabit Ethernet ports (10/100/1000 Mbit/s RJ45)
MACH4002-48G+3X-L3E	943 878-201	Layer 3, Enhanced Management	Media modules: Four sockets (8 ports max each) for total 32 ports 10/100/1000 Mbit/s (Media modules sold separately – see Media modules below. For software functionality – see page 43)
MACH4002-48G+3X-L3P	943 878-301	Layer 3, Professional Management	

NOTE: *Fan module is included in each chassis. Please purchase media modules and power supply separately. See Accessories for SFPs + XFP. Configuration will dictate final port count and media type.

MACH4000 Media Modules

MACH4000 Media Modules			
Product	Part No.	Order No.	Ports
	M4-8TP-RJ45	943 863-001	8 x 10/100/1000 Mbit/s RJ45 (no 1000 Mbit/s with MACH4002 48+4G)
	M4-FAST 8-SFP	943 864-001	8 x 100 Mbit/s SFP sockets*
	M4-FAST 8TP-RJ45-PoE	943 873-001	8 x 10/100 Mbit/s RJ45 ports with Power over Ethernet
	M4-GIGA 8-SFP	943 879-001	8 x 100/1000 Mbit/s SFP sockets* (not for MACH4002 48+4G)

NOTE: *SFP/XFP Fiberoptic transceivers sold separately (see Accessories on page 61 for SFPs).