

MACH100 19" Industrial Workgroup Rack-Mount Switches



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

The MACH100 series of switches are offered in versions with 8, 20, or 24 permanently installed 10/100 Mbit/s RJ45 Ethernet ports, or as modular switches with 8 permanent ports and slots for 2 additional 8-port media modules that are hot-swappable. All versions offer RJ45/SFP combo ports for connection to the network backbone. An all-Gigabit version with 24 10/100/1000 ports is also available.

The MACH104-16TX-PoEP models offer 16 TX ports that support PoE and PoE Plus. Versions of this switch are also available with two 10-Gigabit XFP uplinks or a redundant power supply as well as a fanless variant with an external power supply unit.



Technical Information

Product Description				
Type	MACH102 Series 102-8TP-x	MACH102 Series 102-24TP-x	MACH102 Series 104-20TX-x	MACH102 Series 104-16TX-PoEP-x
Available Ports	10–26	26	24	20–22
Construction				
Mounting	19" Control Cabinet			
Protection Class	IP20			
Dimensions (WxHxD)	448 x 44 x 310 mm			448 x 44 x 345 mm
Weight	appr. 3.75 kg	appr. 4 kg	appr. 4.4 kg	appr. 4.5 kg
Ambient Conditions				
Operating Temperature	0°C to +50°C			
Storage/Transport Temperature	-20°C to +85°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	110 to 240 V AC			
PoE (802.3af) Ports Supported	Yes (variant applicable)			16 ports
PoE Plus (802.3at) Ports Supported	Yes (variant applicable)			8 ports
Regulatory Approvals				
Safety of Industrial Control Equipment	cUL508			Pending
Hazardous Locations	n/a			
Germanischer Lloyd	n/a			
Transportation	n/a			
Railway (norm)	n/a			
Substation	n/a			
Reliability				
MTBF Range	21.6 to 26.5 years	19.1 to 22.8 years	13.7 to 24 years	14.6 to 21.4 years
Warranty	5 years standard			

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



MACH100 19" Industrial Workgroup Rack-Mount Switch Configurations

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

Modular: MACH100 Fast/Gigabit Industrial Workgroup Switches		
Part No.	Order No.	Ports/Functions
MACH102-8TP	943 969-001	8 x 10/100 BASE-TX RJ45 ports, 2 x GE combo ports (100 or 1000 Mbit/s SFPs) and 2 x 8 port media module slots
MACH102-8TP-R	943 969-101	Same as 943 969-001, but with redundant 110/220 V AC power supply



Fixed Ports: MACH100 Fast/Gigabit Industrial Workgroup Switches		
Part No.	Order No.	Ports/Functions
MACH102-8TP-F	943 969-201	8 x 10/100 BASE-TX RJ45 ports and 2 x GE combo ports (100 or 1000 Mbit/s SFPs)
MACH102-8TP-FR	943 969-301	Same as 943 969-201, but with redundant 110/220 V AC power supply
MACH102-24TP-F	943 969-401	24 x 10/100 BASE-TX RJ45 ports and 2 x GE combo ports (100 or 1000 Mbit/s SFPs)
MACH102-24TP-FR	943 969-501	Same as 943 969-401, but with redundant 110/220 V AC power supply

Fixed Ports: MACH100 Gigabit Industrial Workgroup Switches		
Part No.	Order No.	Ports/Functions
MACH104-20TX-F	942 003-001	20 x GE TX Ports, 4 x GE RJ45/SFP combo ports (100 or 1000 Mbit/s SFPs)
MACH104-20TX-FR	942 003-101	Same as 942 003-001, but with redundant power supply

Fixed Ports: MACH100 Gigabit Industrial Workgroup Switches with PoE		
Part No.	Order No.	Ports/Functions
MACH104-20TX-F-4PoE	942 003-201	Same as MACH104-20TX-F, 4 of the 20 10/100/1000 ports are 802.11af PoE

Fixed Ports: MACH100 Gigabit Industrial Workgroup Switches with PoE-Plus		
Part No.	Order No.	Ports/Functions
MACH104-16TX-PoEP	942 030-001	20 Ports in total; 16 x (10/100/1000 BASE-TX, RJ45) PoEPlus and 4 Gigabit Combo Ports (10/100/1000 BASE-TX, RJ45 or 100/1000 BASE-FX, SFP)
MACH104-16TX-PoEP -R	942 026-001	Same as MACH104-16TX-PoEP but with redundant power supply
MACH104-16TX-PoEP -E	942 027-001	Same as MACH104-16TX-PoEP but fanless without power supply
MACH104-16TX-PoEP +2X	942 031-001	22 Ports in total; 16 x (10/100/1000 BASE-TX, RJ45) PoEPlus and 4 Gigabit Combo Ports (10/100/1000 BASE-TX, RJ45 or 100/1000 BASE-FX, SFP) and 2 x 10GE XFP
MACH104-16TX-PoEP +2X -R	942 033-001	Same as MACH104-16TX-PoEP +2X but with redundant power supply
MACH104-16TX-PoEP +2X -E	942 032-001	Same as MACH104-16TX-PoEP +2X but fanless without power supply

Media Modules		
Part No.	Order No.	Ports/Functions
M1-8TP-RJ45	943 970-001	8 x 10/100BASE-TX, RJ45 media module
M1-8TP-RJ45 PoE	942 028-001	8 x 10/100BASE-TX, RJ45 media module PoEPlus
M1-8MM-SC	943 970-101	8 x 100BASE-FX MM, SC media module
M1-8SM-SC	943 970-201	8 x 100BASE-FX SM, SC media module
M1-8SFP	943 970-301	8 x 100BASE-X SFP media module



NOTE: SFPs need to be purchased separately.