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New Product Bulletin

NP 317

Hirschmann™ Introduces PoE/PoE Plus Module for MACH100 Series Switches

Belden reaffirms its lead position in industrial network technology, introducing the PoE/PoE Plus module for MACH100 Workgroup switches. The new 16 ports module is a fan-less solution, yet only occupies the height of a single unit.



Hirschmann Extends its MACH100 Series of Workgroup Switches with PoE/PoE Plus Modules

The new PoE/PoE Plus module for MACH100 series of Workgroup switches offers eight Fast Ethernet ports (10/100 BASE-TX). These ports are capable of providing 15.4 W (PoE) or 30 W (PoE Plus). PoE Plus operation is limited to four of the ports. An LED for each port signals PoE/PoE-Plus. It is also possible to operate PoE and PoE Plus ports simultaneously, providing up to 120 W of total power - meaning that the new module offers considerable flexibility and guarantees your investment to be future proof.

PoE Plus easily powers devices with higher power requirements such as IP cameras with pan-tilt-zoom, Voice over IP (VoIP) videophones or multiband WLAN access points. The three-pin terminal block is used to connect the external power supply and guarantees a secure 48V DC (PoE) or 52V DC (PoE Plus) conveyed via pairs 1/2 and 3/6 - so-called "Phantom power." A total of 16 ports are possible by adding two modules to each MACH100 switch.

Product Features

- 8 PoE/PoE Plus ports per module
- 16 ports per MACH100 Workgroup switch
- Simultaneous operation of PoE and PoE Plus ports
- LEDs to indicate PoE/PoE Plus operation
- External power supply with three-pin terminal block
- Phantom power
- Protection against electrostatic discharges, magnetic fields and interference
- Easy to commission
- Convenient configuration and diagnostics
- Hot-swappable



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Greater Flexibility for
your Network thanks to
more PoE Ports.

MACH100 – Genuine Industrial-Grade Workgroup Switch Family

These hot swappable plug-and-play modules provide shielding against electrostatic discharges, magnetic fields and interference. Network Management software and web interface both facilitate configuration and diagnostics. Light Emitting Diodes (LEDs) on the front of the unit continually display the status of the network connections.

The modular MACH100 Fast Ethernet switches also support Profinet and EtherNet/IP protocols. Copper and fiber optic cables network workgroups – providing the connectivity for the backbone via two Gigabit combo ports. The switches operate in the temperature range of 0°C to +50°C and offer extensive management and redundancy methods and a variety of functions for configuration and diagnostics. They also contain a fan-less cooling system and a redundant power supply.

Proven Technology

The design and software of the new MACH100 family are based on the proven Hirschmann OpenRail platform, and the switches are fully integrated into the Industrial HiVision Management Software. MACH100 switches can also be combined easily with MACH4000 switches.







Technical Data

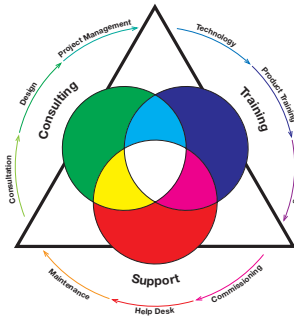
Product Description	
Description	Media module for modular, managed, Industrial Workgroup Switch MACH102 10/100 BASE-TX
Type	M1-8TP-RJ45 PoE
Order No.	942 028 - 001
Network Size - Length of Cable	
Twisted Pair (TP)	0 - 100 m
Power Requirements	
Power consumption	2.2 W (plus up to 120 W PoE per external power supply)
Ambient Conditions	
Operating temperature	0°C to +50°C
Storage/transport temperature	-20°C to +85°C
Relative humidity (non-condensing)	10% to 95%
MTBF	n/a
Mechanical Construction	
Dimensions (W x H x D)	138 x 42 x 90 mm
Mounting	Media Module
Weight	260 g
Protection class	IP20
EMC Interface Immunity	
EEN 61000-4-2 electrostatic discharge (ESD)	4 kV contact discharge, 8 kV air discharge
EN 61000-4-3 electromagnetic field	10 V/m (80 - 2700 MHz)
EN 61000-4-4 fast transients (burst)	2 kV power line, 4 kV data line
EN 61000-4-5 surge voltage	power line: 2 kV (line/earth), 1 kV (line/line), 4 kV data line
EN 61000-4-6 conducted immunity	10 V (150 kHz - 80 MHz)
EMC Emitted Immunity	
FCC CFR47 Part 15	FCC 47 CFR Part 15 Class A
EN 55022	EN 55022 Class A
Scope of Delivery and Accessories	
Scope of delivery	Media module, user manual

MACH100 Basic Devices (M1-8TP-RJ45 PoE suitable for MACH102 devices:)

Product Description	MACH102-8TP	MACH102-8TP-R
		
Order No.	943 969 - 001	943 969 - 101
Description	Fast/Gigabit Ethernet switch according to IEEE 802.3; modular, managed Industrial Workgroup Switch, Layer 2 with Software Professional; Store-and-Forward-Switching; fanless design	
		Redundant power supply
Port type and quantity	8 x 10/100BASE-TX Ports (RJ-45) 2 x Gigabit combo ports and 2 slots for FE media modules M1-xx	
Power Requirements		
Operating voltage	100 – 240 VAC, input frequency: 47 – 63 Hz	
Current consumption / Power output	12 W / 41 Btu (IT)/h (without media modules)	13 W / 44 Btu (IT)/h (without media modules)



The Hirschmann Competence Center



Hirschmann provides an economical end-to-end solution for your network. In addition to its well-known products, Hirschmann also offers a wide range of vendor-independent services - whether it is consulting, training or support. At the Hirschmann Competence Center, you can be sure of tailor-made service from a single supplier.

Whichever technology you use, our experts will support you all the way, from designing your network to optimizing the performance required in the operational phase. Up-to-date manufacturer's expertise, an international service network and fast access to external specialists guarantees you the best possible support. Bundle your individual service package today!

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