

MSP40/MSP42/MSP30/MSP32 Managed Modular DIN Rail Mount Switches



MSP40/MSP42/MSP30/MSP32 MICE Switch Power

The Hirschmann MSP40/MSP30 Layer 3 switch extends the unique security functions of the MSP40/MSP30 family to include high-performance routing. This functionality is offered in a variety of hardware packages. Unicast dynamic routing (UR) and multicast dynamic routing (MR) offer customers an attractive cost benefit – “Just pay for what you need.” With its existing modular IPv6-ready hardware, the MSP40/MSP30 Layer 3 switch enables complete solutions that meet all network requirements.



Technical Information

Product Description		
Type	MSP40/MSP30-Series	MSP42/MSP32-Series
Available Ports	12, 20, 28 x Gigabit ports (variant dependent)	
Enhanced Redundancy Functions	MRP	
Construction		
Mounting	DIN Rail	
Protection Class	IP30	
Dimensions (WxHxD)	236.6/313.8/391 x 147.2 x 141.75 mm (variant dependent)	
Weight	2100/2400/2650 g (variant dependent)	2200/2500/2750 g (variant dependent)
Ambient Conditions		
Operating Temperature	0 °C to +60 °C, -40 °C to +70 °C or -40 °C to +70 °C (inclusive Conformal Coating), IEC 60068-2-2 Dry Heat Test	
Storage/Transport Temperature	-40 °C to +85 °C	
Relative Humidity (non-condensing)	5% to 95%	
Conformal Coating	Yes (variant dependent)	
Interfaces		
V.24 Interface	1 x RJ45 socket	
USB Interface	1 x USB socket (to connect auto-configuration adapter ACA21-USB)	
SD Interface	1 x SD socket (to connect auto-configuration adapter ACA31-SD)	
Software		
Supported HiOS Software Levels	Layer 2 Advanced (L2A), Layer 3 Advanced (L3A)	
Power Requirements		
Operating Voltage	24/36/48 V DC redundant	
PoE (802.3af) Ports Supported	n/a	integrated PoE Plus function with up to 120 W
PoE Plus (802.3at) Ports Supported	n/a	integrated PoE Plus function with up to 120 W
Regulatory Approvals		
Safety of Industrial Control Equipment	cUL508	
Hazardous Locations	ISA-12.12.-01 Class 1 Div. 2 Group A, B, C, D – Haz. Loc (pending), ATEX-95 Approval, Category 3G (Zone 2), Group IIC, T4, “nA” (pending)	
Ship	Germanischer Lloyd (pending)	
Transportation	NEMA TS2 (pending)	
Railway (norm)	EN 50121-4 (pending)	
Substation	IEC 61850-3, IEEE 1613 (pending)	
Reliability		
MTBF Range	www.hirschmann.com	
Warranty	5 years standard	

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



MSP MICE Switch Power Configurations

2.5 Gigabit/Gigabit Ethernet Uplink Ports, Gigabit Ethernet Uplink Ports with PoE+ Capability

MSP40-00 28 O S C Z9 99 HH E 3A XX.X

Design

MSP40 = Full Gigabit Ethernet Ports
 MSP42 = Full Gigabit Ethernet Ports with PoE(+) Capability
 MSP30 = Gigabit Ethernet Uplink Ports
 MSP32 = Gigabit Ethernet Uplink Ports with PoE(+) Capability

Number of Fast Ethernet Ports

00 = 00 x 10/100 Mbit/s (MSP40/MSP42)
 08 = 08 x 10/100 Mbit/s
 16 = 16 x 10/100 Mbit/s
 24 = 24 x 10/100 Mbit/s

Number of Gigabit Ethernet Ports

00 = 00 x 10/100/1000 Mbit/s
 12 = 12 x 10/100/1000 Mbit/s (MSP40/MSP42)
 20 = 20 x 10/100/1000 Mbit/s (MSP40/MSP42)
28 = 28 x 10/100/1000 Mbit/s (MSP40/MSP42)

Number of 10 Gigabit Ethernet Ports

0 = 10/100/1000/10000 Mbit/s

Temperature Range

S = Standard 0 °C to +60 °C
 T = Extended -40 °C to +70 °C
 E = Extended -40 °C to +70 °C with conformal coating

Power Supply

C = 24/36/48 V DC (18 to 60 V DC)
 P = 47 to 57 V DC (PoE), 53 to 57 V DC (PoE+)

Approvals

Z9 = CE, FCC, EN 61131 (EN 60950)	VT = VY + EN50121-4
Y9 = Z9 + cUL508 (UL60950)	T9 = Z9 + EN50121-4
W9 = Z9 + ATEX Zone 2	TY = T9 + cUL508 (UL60950)
WY = Y9 + ATEX Zone 2	U9 = Z9 + GL (ABS, BV, DNS, LR)
X9 = Y9 + ISA 12.12.01 Class 1 Div. 2	UY = U9 + cUL508 (UL60950)
V9 = Z9 + IEC 61850, IEEE 1613	UW = UY + ATEX Zone 2
VY = V9 + cUL508 (UL60950)	UX = UY + ISA 12.12.01 Class 1 Div. 2
VU = VY + GL (ABS, BV, DNS, LR)	

Software Packages

99 = Reserved
 UR = Unicast Routing
 MR = Multicast Routing

Customization

HH = Hirschmann Standard
 HX = Hirschmann Extreme

Software Configuration

E = Entry (Hirschmann Standard Configuration)

Software Level

3A = HiOS Layer 3 Advanced
 2A = HiOS Layer 2 Advanced

Software Release

XX.X = Current Software Release 06.2 = Software Release for MSP40/MSP42

NOTE: The last four categories (**Customization, Software Configuration, Software Level and Software Release**) are optional.



Managed Modular MICE Switch Power Media Modules



MSM20/MSM24/MSM40/MSM42/MSM46/MSM50 Managed Modular MICE Switch Power Media Modules

The variety of transmission media and range of connector versions ensure an optimum degree of flexibility and application coverage.

Transmission media

- Copper
- Multimode Fiber
- Singlemode Fiber
- Long Haul Fiber
- Long Haul+

Connector versions

- RJ45
- SC
- ST
- LC via SFP (small form-factor pluggable)

Any combination of the hot-swappable media modules may be used to attain the desired port density/type on a MICE Switch Power switch. The sole limitation is the number of media module slots on a switch (one media module per slot).

Media modules are available as Fast Ethernet, Gigabit and 2.5 Gigabit variants and their uniform design allows the customer to place them on any module slot of MSP. Additionally PoE+ variants with or without external power of the Gigabit modules ensure integration of PoE based end devices into the network.

Modules: Copper		
Part No.	Order No.	Ports/Features
MSM40-T1T1T1T1S29HH 9E99.9.99	942 077-999	4 x Gigabit Ethernet Ports RJ45, Standard Temperature Range 0 °C to +60 °C, Basic Approvals
MSM40-T1T1T1T1T29HH 9E99.9.99	942 077-999	4 x Gigabit Ethernet Ports RJ45, Extended Temperature Range -40 °C to +70 °C, Basic Approvals
MSM40-C1C1C1C1S29HH 9E99.9.99	942 077-999	4 x Gigabit Ethernet Combo Ports RJ45/SFP, Standard Temperature Range 0 °C to +60 °C, Basic Approvals
MSM40-C1C1C1C1T29HH 9E99.9.99	942 077-999	4 x Gigabit Ethernet Combo Ports RJ45/SFP, Extended Temperature Range -40 °C to +70 °C, Basic Approvals

Modules: Multimode		
Part No.	Order No.	Ports/Features
MSM20-M2T1T1T1S29HH 9E99.9.99	942 077-999	1 x Fast Ethernet Multimode Fiber Port, 3 x Fast Ethernet Ports RJ45, Standard Temperature Range 0 °C to +60 °C, Basic Approvals
MSM20-M2M2T1T1S29HH 9E99.9.99	942 077-999	2 x Fast Ethernet Multimode Fiber Ports, 2 x Fast Ethernet Ports RJ45, Standard Temperature Range 0 °C to +60 °C, Basic Approvals
MSM20-M2M2M2M2S29HH 9E99.9.99	942 077-999	4 x Fast Ethernet Multimode Fiber Ports, Standard Temperature Range 0 °C to +60 °C, Basic Approvals
MSM20-M2M2M2M2T29HH 9E99.9.99	942 077-999	4 x Fast Ethernet Multimode Fiber Ports, Extended Temperature Range -40 °C to +70 °C, Basic Approvals

NOTE: For further combinations and options such as Conformal Coating, please visit our website at: www.hirschmann.com



Managed Modular MSM20/MSM24/MSM40/MSM42/MSM46/MSM50 MICE Switch Power Media Modules

Modules: Singlemode		
Part No.	Order No.	Ports/Features
MSM20-S2T1T1T1SZ9HH9E99.9.99	942 077-999	1 x Fast Ethernet Singlemode Fiber Port, 3 x Fast Ethernet Ports RJ45, Standard Temperature Range 0 °C to +60 °C, Basic Approvals
MSM20-S2S2T1T1SZ9HH9E99.9.99	942 077-999	2 x Fast Ethernet Singlemode Fiber Ports, 2 x Fast Ethernet Ports RJ45, Standard Temperature Range 0 °C to +60 °C, Basic Approvals
MSM20-S2S2S2S2SZ9HH9E99.9.99	942 077-999	4 x Fast Ethernet Singlemode Fiber Ports, Standard Temperature Range 0 °C to +60 °C, Basic Approvals
MSM20-S2S2S2S2T2Z9HH9E99.9.99	942 077-999	4 x Fast Ethernet Singlemode Fiber Ports, Extended Temperature Range -40 °C to +70 °C, Basic Approvals



Modules: Long Haul		
Part No.	Order No.	Ports/Features
MSM20-G2T1T1T1SZ9HH9E99.9.99	942 077-999	1 x Fast Ethernet Long Haul Fiber Port, 3 x Fast Ethernet Ports RJ45, Standard Temperature Range 0 °C to +60 °C, Basic Approvals
MSM20-G2G2T1T1SZ9HH9E99.9.99	942 077-999	2 x Fast Ethernet Long Haul Fiber Ports, 2 x Fast Ethernet Ports RJ45, Standard Temperature Range 0 °C to +60 °C, Basic Approvals
MSM20-G2G2G2G2SZ9HH9E99.9.99	942 077-999	4 x Fast Ethernet Long Haul Fiber Ports, Standard Temperature Range 0 °C to +60 °C, Basic Approvals
MSM40-C1C1C1C1T2Z9HH9E99.9.99	942 077-999	4 x Fast Ethernet Long Haul Fiber Ports, Extended Temperature Range -40 °C to +70 °C, Basic Approvals

Modules: Power over Ethernet		
Part No.	Order No.	Ports/Features
MSM42-T1T1T1T1SZ9HH9E99.9.99	942 077-999	4 x Gigabit Ethernet PoE+ Ports RJ45, Standard Temperature Range 0 °C to +60 °C, Basic Approvals
MSM42-T1T1T1T1TZ9HH9E99.9.99	942 077-999	4 x Gigabit Ethernet PoE+ Ports RJ45, Extended Temperature Range -40 °C to +70 °C, Basic Approvals
MSM46-T1T1T1T1TZ9HH9E99.9.99	942 077-999	4 x Gigabit Ethernet PoE+ Ports RJ45 with external power, Extended Temperature Range -40 °C to +70 °C, Basic Approvals

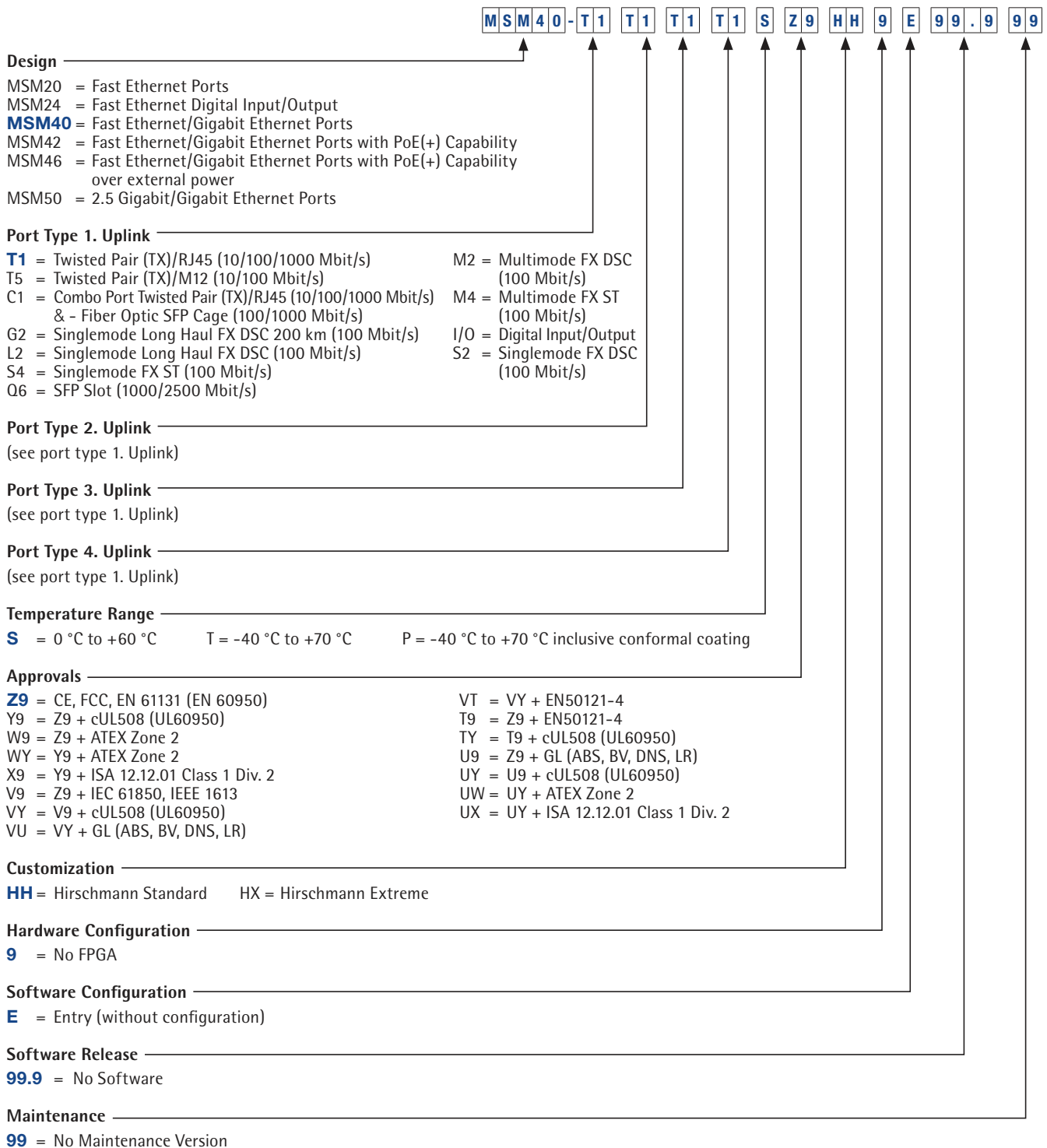
Modules: Digital I/O		
Part No.	Order No.	Ports/Features
MSM24-IOIOIOIOSZ9HH9E99.9.99	942 077-999	4 x Digital I/O Interface, Standard Temperature Range 0 °C to +60 °C, Basic Approvals
MSM24-IOIOIOIOTZ9HH9E99.9.99	942 077-999	4 x Digital I/O Interface, Extended Temperature Range -40 °C to +70 °C, Basic Approvals

Modules: 2.5 Gigabit Ethernet		
Part No.	Order No.	Ports/Features
MSM50-Q6Q6Q6Q6SZ9HH 9E99.9.99	942 077-999	4 x 2.5 Gigabit/Gigabit Ethernet Ports RJ45, Standard Temperature Range 0 °C to +60 °C, Basic Approvals
MSM50-Q6Q6Q6Q6T2Z9HH 9E99.9.99	942 077-999	4 x 2.5 Gigabit/Gigabit Ethernet Ports RJ45, Extended Temperature Range -40 °C to +70 °C, Basic Approvals

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MICE Switch Power Media Module Configurations

Fast Ethernet Ports, Fast Ethernet/Gigabit Ethernet Ports, Fast Ethernet/Gigabit Ethernet Ports with PoE+ Capability, Fast Ethernet/Gigabit Ethernet/2.5 Gigabit Ethernet Ports



NOTE: The categories (Customization, Hardware Configuration, Software Configuration and Software Release) are optional.