

Product: MSP30-16040SCY9MRHHE3A

Configurator: MSP30-16040SCY9MRHHE3A



Configurator Description

The MSP switch product range offers complete modularity and various high-speed port options with up to 10 Gbit/s. Optional Layer 3 software packages for dynamic unicast routing (UR) and dynamic multicast routing (MR) offer you an attractive cost benefit – "Just pay for what you need." Thanks to Power over Ethernet Plus (PoE+) support, terminal equipment can also be powered cost-effectively.

Technical Specifications

Product description

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| Type | MSP30-20-3A (Product Code: MSP30-16040SCY9MRHHE3A.X.XX) |
| Description | Modular Gigabit Ethernet Industrial Switch for DIN Rail, Fanless design , Software HiOS Layer 3 Advanced |
| Software Version | HiOS 09.0.10 |
| Part Number | 942076006 |
| Configurator Part Number | 942076998 |
| Port Type and Quantity | Fast Ethernet ports in total: 16; Gigabit Ethernet ports: 4 |

More Interfaces

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| Power supply/signaling contact | 2 x plug-in terminal block, 4-pin |
| V.24 interface | 1 x RJ45 socket |
| SD-card slot | 1 x SD card slot to connect the auto configuration adapter ACA31 |
| USB interface | 1 x USB to connect auto-configuration adapter ACA21-USB |

Network size - cascability

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| Line - / star topology | any |
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Power requirements

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| Operating Voltage | 24 V DC (18-32) V |
| Power consumption | 17.0 W |
| Power output in BTU (IT)/h | 58 |

Software

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| Switching | CoS Queue Management, Egress Interface Shaping, Fast Aging, Flow Control (802.3X), Forward unknown multicast to query ports, GARP Multicast Registration Protocol (GMRP), GARP VLAN Registration Protocol (GVRP), IGMP Snooping/Querier per VLAN (v1/v2/v3), Independent VLAN Learning, Ingress Storm Protection, Interface Trust Mode, IP Egress DiffServ Classification and Policing, IP Ingress DiffServ Classification and Policing, IP subnet-based VLAN, Jumbo Frames, MAC-based VLAN, Multiple MAC Registration Protocol (MMRP), Multiple Registration Protocol (MRP), Multiple VLAN Registration Protocol (MVRP), Protocol-based VLAN, QoS / Port Prioritization (802.1D/p), Queue-Shaping / Max. Queue Bandwidth, Static Unicast/Multicast Address Entries, TOS/DSCP Prioritization, Unknown Multicast Filtering, VLAN (802.1Q), VLAN Unaware Mode, Voice VLAN |
| Redundancy | HIPER-Ring (Ring Switch), HIPER-Ring over Link Aggregation, HiVRRP (VRRP enhancements), Link Aggregation with LACP, Link Backup, Media Redundancy Protocol (MRP) (IEC62439-2) - Redundancy Client, Media Redundancy Protocol (MRP) (IEC62439-2) - Redundancy Manager, MRP over Link Aggregation, MSTP (802.1Q), Redundant Network Coupling, RSTP 802.1D-2004 (IEC62439-1), RSTP Guards, Sub Ring Manager, VRRP, VRRP Ping Answer, VRRP Tracking |
| Management | DNS Client, Dual Software Image Support, HTTP, HTTPS, LLDP (802.1AB), LLDP-MED, OPC-UA Server, SCP, SFTP, SNMP v1/v2/v3, SSHv2, Telnet, TFTP, Traps, V.24 |
| Diagnostics | Address Conflict Detection for routing interfaces, Configuration Check Dialog, Copper Cable Test, Device Status Indication, Duplex Mismatch Detection, Email Notification, LEDs, Link Flap Detection, Link Speed and Duplex Monitoring, Loop Protection, MAC Notification, Management Address Conflict Detection, Overload Detection, Persistent Logging on ACA, Port Mirroring 1:1, Port Mirroring 8:1, Port Mirroring N:1, Port Mirroring N:2, Port Monitoring with Auto-Disable, RMON (1,2,3,9), RSPAN, Self-Tests on Cold Start, SFLOW, SFP Management, Signal Contact, Snapshot Configuration Feature, Switch Dump, Syslog, System Information, TCPDump, VLAN Mirroring |

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| Configuration | Auto Disable, AutoConfiguration Adapter ACA21/22 (USB), AutoConfiguration Adapter ACA31 (SD card), Automatic Configuration Undo (roll-back), Backup config on a remote server when saving, BOOTP/DHCP Client with Auto-Configuration, Clear config but keep IP settings, CLI script handling over ENVN at boot, CLI Scripting, Command Line Interface (CLI), Configuration Fingerprint, Context-sensitive Help, DHCP Relay with Option 82, DHCP Server: per Port, DHCP Server: Pools per VLAN, Full-featured MIB Support, HiDiscovery, HTML5 based Management, Web-based Management, XML-based Configuration File |
| Security | Access to Management restricted by VLAN, ACL Flow-based Limiting, Appropriate Use Banner, Audit Trail, CLI Logging, Configurable Number of Login Attempts, Configurable Password Policy, Denial-of-Service Prevention, Device Security Indication, DHCP Snooping, Dynamic ARP Inspection, Egress IPv4-based ACL, Egress MAC-based ACL, Egress VLAN-based ACL, Format options for MAC authentication bypass, Guest/unauthenticated VLAN, HTTPS Certificate Management, Ingress IPv4-based ACL, Ingress MAC-based ACL, Ingress VLAN-based ACL, Integrated Authentication Server (IAS), IP Source Guard, LDAP, Local User Management, MAC Authentication Bypass, MAC-based Port Security, Multi-Client Authentication per Port, Multiple Privilege Levels, Password change on first login, Port-based Access Control with 802.1X, RADIUS Client, RADIUS Policy Assignment, RADIUS VLAN Assignment, Remote Authentication via RADIUS, Restricted Management Access, SNMP Logging, Time-based ACL, User Account Locking, VLAN-based ACL |
| Time synchronisation | Buffered Real Time Clock, PTPv2 Boundary Clock, PTPv2 Transparent Clock two-step, SNTP Client, SNTP Server |
| Industrial Profiles | EtherNet/IP Protocol, IEC61850 Protocol (MMS Server, Switch Model), Modbus TCP, PROFINET Protocol |
| Miscellaneous | Digital IO Management, Manual Cable Crossing, Port Power Down |
| Routing | Equal Cost Multiple Path (ECMP), Full Wire-Speed Routing, ICMP Filter, ICMP Router Discovery (IRDP), IP/UDP Helper, Loopback Interface, Net-directed Broadcasts, OSPFv2, Port-based Router Interfaces, Proxy ARP, RIP v1/v2, Static Route Tracking, Static Unicast Routing, VLAN-based Router Interfaces |
| Multicast routing | DVMRP, IGMP Proxy (Multicast Routing), IGMP v1/v2/v3, PIM-DM (RFC3973), PIM-SM / SSM (RFC4601) |

Ambient conditions

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| Operating temperature | 0-+60 |
| Minimum Storage Temperature | -40-+70 °C |
| Relative humidity (non-condensing) | 5-95 % |

Mechanical construction

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| Dimensions (WxHxD) | 314 x 148 x 142 mm |
| Weight | 2.4 kg |
| Mount Type | DIN rail |
| Protection class | IP20 |

Mechanical stability

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| IEC 60068-2-6 vibration | 5 Hz - 8.4 Hz with 3.5 mm amplitude; 8.4 Hz-150 Hz with 1 g |
| IEC 60068-2-27 shock | 15 g, 11 ms duration, 18 shocks |

EMC interference immunity

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| EN 61000-4-2 electrostatic discharge (ESD) | ± 4 kV contact discharge; ± 8 kV air discharge |
| EN 61000-4-3 electromagnetic field | 10 V/m (80 MHz-3000 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); data line: ± 1 kV (line/earth) |
| EN 61000-4-6 Conducted Immunity | 10 V (150 kHz-80 MHz) |

EMC emitted immunity

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| EN 55022 | EN 55032 Class A |
| FCC CFR47 Part 15 | FCC 47CFR Part 15, Class A |

Approvals

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| Basis Standard | CE, FCC, EN61131 |
| Safety of industrial control equipment | EN 60950, cUL508, UL60950 |
| Transportation | NEMA TS2 |

Reliability

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| Guarantee | 60 months (please refer to the https://assets.belden.com/m/1424ddb7a3280e7a/original/Hirschmann-Automation-and-Control-GmbH-Terms-of-Guarantee.pdf terms of guarantee for detailed information) |
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Scope of delivery and accessories

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| Accessories | MICE Switch Power Media Modules MSM; Rail Power Supply RPS 30, RPS 60/48V EEC, RPS 80, RPS90/48V HV, RPS90/48V LV, RPS 120 EEC; USB to RJ45 Terminal cable; Sub-D to RJ45 Terminal Cable Auto Configuration Adapter (ACA21, ACA31); Industrial HiVision Network Management System; 19" Installation frame |
| Scope of delivery | Device (backplane and power module), 2 x terminal block, General safety instructions |

Further Instructions

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| Product Documentation | https://www.doc.hirschmann.com |
| Certificates | https://www.doc.hirschmann.com/certificates |
| Software Download | https://my.belden.com/s/downloads |

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