

Ethernet Switch mCon 7050-B1V



mCon 7050-B1V M12 D-coding, managed Fast Ethernet Switch for industrial applications

Advantages

- High protection degree IP 65 / IP 67
- Robust metal housing
- EMC, temperature range and mechanical stability meet highest requirements
- Plug & Play Installation
- All Ethernet interfaces are protected against overvoltages.

General Description

Switches divide collision domains into point-to-point connections between the network components and the relevant devices, thus excluding collisions.

The Fast Ethernet Switch mCon 7050-B1V allows the connection of up to five devices via Shielded Twisted Pair cables acc. to IEC 802.3 and can be used directly in industrial environments.

Thus it is possible to reduce the termination time to set up industrial networks. Any network configuration can be realised. Connectors guarantee a secure and quick assembly.

Technical Details

Housing and Assembly

Housing	Robust metal housing of zinc die cast
Dimensions	45 x 120 x 87 (W x D x H in mm, without connector)
Assembly	35 mm standard rail acc. to DIN EN 60715 Panel mounting upright assembly Panel mounting flat assembly

Power Supply

Input voltage	24 / 48 V DC (permissible range: 12 ... 60 V DC)
Current consumption	approx. 160 mA (at 24 V DC)
Terminals	connectorized with HARAX® M12 connector redundant power supply

Ethernet Interface

Ports	5x 10/100Base-TX
Data transmission rate	10 or 100 Mbit/s / Auto-negotiation
Cable	Shielded Twisted Pair (STP) and Unshielded Twisted Pair (UTP), Category 5
Terminals	connectorized with M12 circular connectors, D-coding Auto-crossing function
Maximum cable length	100 m (with Category 5) acc. to DIN EN 50173

Environmental conditions

Protection degree	IP 65 / IP 67
Operating temperature	-40 °C ... +70 °C
Operating humidity	10 % ... 95 %, not condensing

All datas given are in line with the actual state of art and therefore not binding. HARTING reserves the right to modify designs without giving the relevant reasons.

Identification

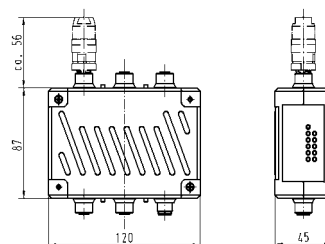
Part-Number

Drawing

Dimensions in mm

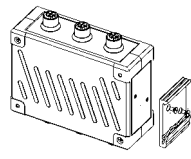
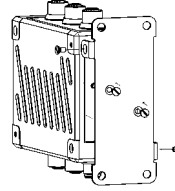
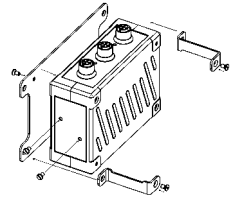
mCon 7050-B1V
Fast Ethernet Switch, managed
5 x 10/100Base-TX
M12 D-coding

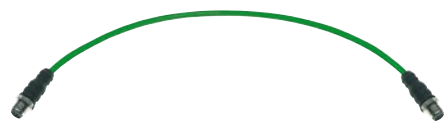
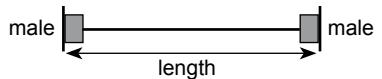
20 70 305 4943



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Accessories	Part-Number	Drawing	Dimensions in mm
Set for assembly on standard rail acc. to DIN EN 60715	20 80 000 0003		
Set for panel mounting upright assembly	20 80 010 0001		
Set for panel mounting flat assembly	20 80 024 0002		

Identification	Part-Number	Drawing	Dimensions in mm
<p>Pre-assembled and tested cable for Industrial Ethernet IP 65 / IP 67 (in mated condition) Metal version</p> <p>2 x circular connectors M12 D-coding, straight version length: 1 m 3 m 5 m</p> <p>2 x circular connectors M12 D-coding, angled version length: 1 m 3 m 5 m</p> <p>1) Length on request</p>	<p>21 03 485 1401 21 03 485 1403 21 03 485 1405 21 03 485 1400¹⁾</p> <p>21 03 485 3401 21 03 485 3403 21 03 485 3405 21 03 485 3400¹⁾</p>	 <p>Cable: 0.34 mm² / AWG 22</p> 	

Identification	Part-Number	
	Power Supply	Ethernet Interface
HARAX [®] M12-L circular connector	21 03 212 2305	
HARAX [®] M12-L circular connector screened, 4-pin male, D-coding		21 03 281 1405
Cover M12	21 01 000 0003	21 01 000 0003

Technical Characteristics

Basic Functions		
	Store and Forward Switching Mode	IEEE 802.3
	Manual and Dynamic IP Address Assignment	
Port-Settings	Auto-negotiation on / off	
	Port Speed 10 Mbit/s / 100 Mbit/s / 1000 Mbit/s	
	Half / Full duplex	
	Port disable / enable	
	Link Up/Down Trap disable / enable	
	Flow Control disable / enable	
Network Discovery	Link Layer Discovery Protocol (LLDP)	802.1AB, 2005
File Transfer	Firmware import and export via TFTP	
	Configuration import and export via TFTP	
Time Settings	Manual time setting	
	Simple Network Time Protocol (SNTP)	RFC 1305, RFC 4330
User Management	Admin, Guest and Service Level	
Service	Service Mode via port 1	
QoS		
	Quality of Service (QoS)	IEEE 802.1p
VLAN		
	Port protocol based VLANs	IEEE 802.1Q Rev D5.0, 2005
Redundancy		
	Spanning Tree (STP)	IEEE 802.1D (2004)
	Rapid Spanning Tree (RSTP)	IEEE 802.1D (2004)
Security		
	Port-Based Network Access Control (Release 2.1) Port Based Authentication with EAP	802.1x (2004)
	RADIUS Client (Release 2.1)	RFC 2138
	IP authorized manager	
Link Aggregation		
	Link Aggregation (LACP) (Release 2.1)	IEEE 802.3ad (2005)
Multicast		
	IGMP Snooping (v1, v2, v3) with support for querier	RFC 1112, 2236, 3376
DHCP		
	DHCP Client	RFC 2131
	DHCP relay agent	RFC 2131
	DHCP Option 82 (Release 2.1)	RFC 3046
Alarm		
	Alarms via E-mail (SMTP) and SNMP Traps	
	Signalling contact for low voltage detection or Link break	
Diagnostic		
	Port diagnostic	
	Port Mirroring	
	Switch History	
	MAC Address Table	
	RMON (1,2,3 & 9 groups)	RFC 2819
Management		
	Password protected Web-Management interface	
	SNMP (v1, v2c, v3) agent & MIB support	RFC 1155, 1157, 1212, 1213, 1215, 2089, 2578, 3411, 3412, 3413, 3414, 3415, 3416, 3417, 3584