

Data sheet

IM 053ML - MECHATROLINK-4 (053-1ML40)

Technical data

Order no.	053-1ML40
Type	IM 053ML - MECHATROLINK-4
Module ID	-

General information

Note	-
Features	MECHATROLINK according to IEC 61158, IEC 61784 Up to 64 peripheral modules Supports standard I/O profile (16byte and 64byte mode) Multi SDevice node with max. 15 stations Max. 1024byte input and 1024byte output data Integrated DC 24V power supply for power and electronic section supply of the periphery modules Integrated Web server Configuration is done via software tool respectively Web server

Technical data power supply

Power supply (rated value)	DC 24 V
Power supply (permitted range)	DC 20.4...28.8 V
Reverse polarity protection	yes
Current consumption (no-load operation)	114 mA
Current consumption (rated value)	0.83 A
Inrush current	4.4 A
I^2t	0.3 A ² s
Max. current drain at backplane bus	3 A
Max. current drain load supply	10 A
Power loss	4.9 W

Status information, alarms, diagnostics

Status display	yes
Interrupts	yes, parameterizable
Process alarm	yes, parameterizable
Diagnostic interrupt	yes, parameterizable
Diagnostic functions	yes, parameterizable
Diagnostics information read-out	possible
Supply voltage display	green LED
Service Indicator	yellow LED
Group error display	red SF LED
Channel error display	none

Hardware configuration

Racks, max.	1
Modules per rack, max.	64
Number of digital modules, max.	64
Number of analog modules, max.	64

Communication

Fieldbus	MECHATROLINK-4
Type of interface	Ethernet 100 MBit
Connector	2 x RJ45

Topology	Line
Electrically isolated	yes
Number of participants, max.	-
Node addresses	-
Transmission speed, min.	100 Mbit/s
Transmission speed, max.	100 Mbit/s
Address range inputs, max.	1024 Byte
Address range outputs, max.	1024 Byte
Number of TxPDOs, max.	-
Number of RxPDOs, max.	-
Supported profile	Standard I/O profiles
Supported transfer cycle	125us, 250us, 500us, 750us, 1ms... 8ms (every 500us)
Cyclic data size per node	16byte (SDevice), 64byte (peripheral)
Max. Number of nodes	9 (00h : for SDevice, 01h-08h for modules)
Supported communication method	Cyclic, Event driven, Message
Supported command "Cyclic"	NOP, ID_RD, CONFIG, ALM_RD, ALM_CLR, SYNC_SET, CONNECT, DISCONNECT, DATA_RWA, DATA_RWS
Supported command "Event driven"	NOP, ID_RD, CONNECT, DISCONNECT
Supported command "Message"	Memory read, Read max. message size

Datasizes

Input bytes	1024
Output bytes	1024
Parameter bytes	-
Diagnostic bytes	-

Housing

Material	PPE / PPE GF10
Mounting	Profile rail 35 mm

Mechanical data

Dimensions (WxHxD)	48.5 mm x 109 mm x 76.5 mm
Net weight	165 g
Weight including accessories	165 g
Gross weight	181 g

Environmental conditions

Operating temperature	0 °C to 60 °C
Storage temperature	-40 °C to 70 °C

Certifications

UL certification	yes
KC certification	yes
UKCA certification	yes
ChinaRoHS certification	yes