

**Data sheet**  
**IM 053EC (053-1EC01)**
**Technical data**

<b>Order no.</b>	<b>053-1EC01</b>
Type	IM 053EC
Module ID	-
<b>General information</b>	
Note	-
Features	2-Port Switch RJ45 100BaseTX full duplex Up to 64 peripheral modules Supports the application profile: CoE, EoE, FoE Supports FMM (Free Module Mapping) Various diagnostics functions Integrated DC 24V power supply for power and electronic section supply of the periphery modules Operation Modes (FreeRun, SyncManager-Event, Distributed Clock) Supports HotConnect, Easy Maintenance Web server integrated Status LEDs
<b>Technical data power supply</b>	
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)	95 mA
Current consumption (rated value)	0.95 A
Inrush current	3.9 A
I <sup>2</sup> t	0.14 A <sup>2</sup> s
Max. current drain at backplane bus	3 A
Max. current drain load supply	10 A
Power loss	3 W
<b>Status information, alarms, diagnostics</b>	
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	-
Group error display	red SF LED
Channel error display	none
<b>Hardware configuration</b>	
Racks, max.	1
Modules per rack, max.	64
Number of digital modules, max.	64
Number of analog modules, max.	64
<b>Communication</b>	
Fieldbus	EtherCAT

Type of interface	Ethernet 100 MBit
Connector	2 x RJ45
Topology	-
Electrically isolated	yes
Number of participants, max.	65535
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.	-

#### Functionality MECHATROLINK-III slave

Supported profile	-
Supported transfer cycle	-
Cyclic data size per node	-
Max. Number of nodes	-
Supported communication method	-
Supported command "Cyclic"	-
Supported command "Event driven"	-
Supported command "Message"	-

#### Datasizes

Input bytes	20
Output bytes	-
Parameter bytes	3
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	160 g
Weight including accessories	160 g
Gross weight	175 g

#### Environmental conditions

Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C

#### Certifications

UL certification	in preparation
KC certification	in preparation