



Multi-channel process display MPA 20



Benefits

- Up to 90 channels for inputs/outputs
- 35 mathematical/logical functions
- 8 integrated PID controllers with autotuning
- 8 time-controlled/event-controlled profiles
- Touchscreen operation and remote operation
- Multi-level password system
- Web server with HTML5 widgets
- E-mail function



Application

Universal application for displaying and logging up to 16 independent analogue input signals, 8 binary inputs, 4 resistance thermometer inputs (RTD), 4 thermocouple inputs (TC) with freely selectable scaling and units. MPA 20 is very well suited for applications in which several physical measured variables reflect the state of an object and the state is controlled by several parameters at the same time.

Versions

Supply DC 19–50 V, AC 16–35 V

Slot D	Slot C/B/A	Part no.
Empty	–	MPA 20 010101
Empty	–	MPA 20 010102
Empty	–	MPA 20 010103
Empty	–	MPA 20 010104
Empty	–	MPA 20 010105
Empty	–	MPA 20 010106
Empty	12 x SPST relay 1A	MPA 20 010107
USB host port rear	–	MPA 20 010201
USB host port rear	–	MPA 20 010202

Blue part no. = in-stock items



Slot D	Slot C/B/A	Part no.
USB host port rear	–	MPA 20 010203
USB host port rear	–	MPA 20 010204
USB host port rear	–	MPA 20 010205
USB host port rear	–	MPA 20 010206
USB host port rear	12 x SPST relay 1A	MPA 20 010207
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 010301
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 010302
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 010303
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 010304
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 010305
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 010306
USB host port rear, Ethernet 10 Mbit/s	12 x SPST relay 1A	MPA 20 010307

Blue part no. = in-stock items

Supply AC/DC 85–260 V

Slot D	Slot C/B/A	Part no.
Empty	–	MPA 20 020101
Empty	–	MPA 20 020102
Empty	–	MPA 20 020103
Empty	–	MPA 20 020104
Empty	–	MPA 20 020105
Empty	–	MPA 20 020106
Empty	12 x SPST relay 1A	MPA 20 020107
USB host port rear	–	MPA 20 020201
USB host port rear	–	MPA 20 020202
USB host port rear	–	MPA 20 020203
USB host port rear	–	MPA 20 020204
USB host port rear	–	MPA 20 020205
USB host port rear	–	MPA 20 020206
USB host port rear	12 x SPST relay 1A	MPA 20 020207

Blue part no. = in-stock items



Slot D	Slot C/B/A	Part no.
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 020301
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 020302
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 020303
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 020304
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 020305
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 020306
USB host port rear, Ethernet 10 Mbit/s	12 x SPST relay 1A	MPA 20 020307

Blue part no. = in-stock items

Supply DC 19–50 V, AC 16–35 V Special version sealing frame IP 65

Slot D	Slot C/B/A	Part no.
Empty	–	MPA 20 01010101
Empty	–	MPA 20 01010201
Empty	–	MPA 20 01010301
Empty	–	MPA 20 01010401
Empty	–	MPA 20 01010501
Empty	–	MPA 20 01010601
Empty	12 x SPST relay 1A	MPA 20 01010701
USB host port rear	–	MPA 20 01020101
USB host port rear	–	MPA 20 01020201
USB host port rear	–	MPA 20 01020301
USB host port rear	–	MPA 20 01020401
USB host port rear	–	MPA 20 01020501
USB host port rear	–	MPA 20 01020601
USB host port rear	12 x SPST relay 1A	MPA 20 01020701
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 01030101
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 01030201
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 01030301
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 01030401

Blue part no. = in-stock items



Slot D	Slot C/B/A	Part no.
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 01030501
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 01030601
USB host port rear, Ethernet 10 Mbit/s	12 x SPST relay 1A	MPA 20 01030701

Blue part no. = in-stock items

Supply AC/DC 85–260 V Special version sealing frame IP 65

Slot D	Slot C/B/A	Part no.
Empty	–	MPA 20 02010101
Empty	–	MPA 20 02010201
Empty	–	MPA 20 02010301
Empty	–	MPA 20 02010401
Empty	–	MPA 20 02010501
Empty	–	MPA 20 02010601
Empty	12 x SPST relay 1A	MPA 20 02010701
USB host port rear	–	MPA 20 02020101
USB host port rear	–	MPA 20 02020201
USB host port rear	–	MPA 20 02020301
USB host port rear	–	MPA 20 02020401
USB host port rear	–	MPA 20 02020501
USB host port rear	–	MPA 20 02020601
USB host port rear	12 x SPST relay 1A	MPA 20 02020701
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 02030101
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 02030201
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 02030301
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 02030401
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 02030501
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 02030601
USB host port rear, Ethernet 10 Mbit/s	12 x SPST relay 1A	MPA 20 02030701

Blue part no. = in-stock items

**Supply DC 19–50 V, AC 16–35 V Special version USB host port front**

Slot D	Slot C/B/A	Part no.
Empty	–	MPA 20 01010102
Empty	–	MPA 20 01010202
Empty	–	MPA 20 01010302
Empty	–	MPA 20 01010402
Empty	–	MPA 20 01010502
Empty	–	MPA 20 01010602
Empty	12 x SPST relay 1A	MPA 20 01010702
USB host port rear	–	MPA 20 01020102
USB host port rear	–	MPA 20 01020202
USB host port rear	–	MPA 20 01020302
USB host port rear	–	MPA 20 01020402
USB host port rear	–	MPA 20 01020502
USB host port rear	–	MPA 20 01020602
USB host port rear	12 x SPST relay 1A	MPA 20 01020702
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 01030102
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 01030202
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 01030302
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 01030402
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 01030502
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 01030602
USB host port rear, Ethernet 10 Mbit/s	12 x SPST relay 1A	MPA 20 01030702

Blue part no. = in-stock items

Supply AC/DC 85–260 V Special version USB host port front

Slot D	Slot C/B/A	Part no.
Empty	–	MPA 20 02010102
Empty	–	MPA 20 02010202
Empty	–	MPA 20 02010302
Empty	–	MPA 20 02010402

Blue part no. = in-stock items



Slot D	Slot C/B/A	Part no.
Empty	–	MPA 20 02010502
Empty	–	MPA 20 02010602
Empty	12 x SPST relay 1A	MPA 20 02010702
USB host port rear	–	MPA 20 02020102
USB host port rear	–	MPA 20 02020202
USB host port rear	–	MPA 20 02020302
USB host port rear	–	MPA 20 02020402
USB host port rear	–	MPA 20 02020502
USB host port rear	–	MPA 20 02020602
USB host port rear	12 x SPST relay 1A	MPA 20 02020702
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 02030102
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 02030202
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 02030302
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 02030402
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 02030502
USB host port rear, Ethernet 10 Mbit/s	–	MPA 20 02030602
USB host port rear, Ethernet 10 Mbit/s	12 x SPST relay 1A	MPA 20 02030702

Blue part no. = in-stock items

Description

Digital display unit with integrated data logger in plastic housing for control panel mounting which allows for simultaneous measurement, visualisation and controlling of multiple channels. MPA 20 can operate autonomously or in conjunction with external measuring equipment and actuators. The multi-channel process display is designed as a modular device that consists of a base unit and optional input modules and output modules. The base unit comprises the main processor, a touch display, a switched-mode power supply (two available versions: 19–35 VDC and 85–260 VAC) as well as the communication interfaces (USB and RS 485).



Technical specifications

Display

TFT touchscreen display 5.7 "

User interface languages: German, English, French

Indication of vale, bar chart, diagram, pointer, groups

Measuring range

Current inputs 0-20 mA

Voltage inputs 0-5 V, 1-5 V, 0-10 V, 2-10 V

Resistance thermometers

Thermocouple

Operating temperature range

Ambient: 0/50 °C

Supply voltage

AC 16 – 35 V, DC 19 – 50 V

AC/DC 85 – 260 V

Input resistance

Current: < 65 Ohm

Voltage: > 100 kOhm

Housing

Panel housing

W x H x D: 144 x 144 x 110 mm

Weight

0.35 kg

Degree of protection

Front (sealing frame): IP 65 (EN 60529)

Front (USB at front): IP 40 (EN 60529)

Housing, connection terminals: IP 20 (EN 60529)

Electrical connection

Plug-in screw terminals (1.5 mm²)

Interfaces

RS 485 (Modbus RTU)

RS 232

USB host

Ethernet (Modbus TCP)

Data memory

Internal memory 1.5 GB, max. 125,000,000 values

Acquisition of measured values of up to 60 channels

2 selectable measurement frequencies (max. 10 Hz)

Comprehensive trigger functions

Data transmission via USB flash drive or Ethernet

Slot P

01: Supply DC 19-50 V, AC 16-35 V

01: Output DC 24 V 200 mA

01: Digital input DC 24 V, RS-485 Modbus RTU

02: Supply AC/DC 85-260 V

02: Output DC 24 V 200 mA

02: Digital input DC 24 V, RS-485 Modbus RTU

Slot D

01: Empty

02: USB host port rear

03: USB host port rear

03: Ethernet 10 Mbit/s

Slot C/B/A

07: 12 x SPST relay 1A

Special version

01: Sealing frame IP 65

02: USB host port front

Options

- Software
- DIN rail adapter