

Programmable Process Display Type M3D2

Low Cost

DISPLAY FEATURES



- Large 45 mm LED Display
- 3 digits
- Programmable universal input
- 2 alarm relay outputs
- Self-Testing and Self-Calibration
- High accuracy
- 'Cold junction' correction
- RS485 serial interface - optional
- Front dimensions 144 x 72 mm



APPLICATIONS

The M3D2 is a multifunction low cost industrial grade Display. It can be used as process indicator in Production and Control rooms, Laboratories, data centers and warehouses. It has universal programmable input for the most common RTDs, Thermocouples and linear Signal. The M3D2 is equipped with 2 relay outputs.

SPECIFICATIONS

Input	(programmable)
<i>Pt100 (w=1.385); 3-wire</i>	-100...850 °C
<i>Pt1000 (w=1.385); 3-wire</i>	-100...600 °C
<i>PTC (1k at 25 °C); 3-wire</i>	-50...150 °C
<i>PTC (2k at 25 °C); 3-wire</i>	-50...150 °C
<i>Thermocouple "T"</i>	-40...400 °C
<i>Thermocouple "J"</i>	-20...1000 °C
<i>Thermocouple "K"</i>	-20...1000 °C
<i>Thermocouple "S"</i>	0...1000 °C
<i>Thermocouple "R"</i>	0...1000 °C
<i>Thermocouple "B"</i>	100...1000 °C
<i>Linear voltage 0...10 V</i>	-199...999, programmable
<i>Linear current 0 (4)...20 mA</i>	-199...999, programmable
<i>Custom linear (option)⁽¹⁾</i>	-199...999, programmable
<i>Two-wire external transmitter</i>	4...20 mA ⁽²⁾
<i>Manual input offset</i>	programmable
<i>Input type selection</i>	programmable
<i>Decimal point selection</i>	programmable
<i>Temperature measurement unit</i>	C or °F, programmable

Outputs	2 relay outputs
<i>Relay electromechanical</i>	5A/250V w/ NO/NC contact
<i>Solid state relay</i>	1A/250VAC
<i>MOS gate</i>	0.1A/60V, optically isolated
<i>Output for external SSR</i>	5...24 V, 50 mA
<i>Control algorithm</i>	ON/OFF
<i>Set point</i>	within input range limits
<i>Alarms</i>	programmable
<i>Serial interface</i>	RS485, isolated

⁽¹⁾ Instead of linear current

⁽²⁾ Provides loop supply voltage - 24 VDC (only with isolated power supply)



Accuracy	
Measurement error	0.3% from span
Temperature drift	0.02% from span for 1 °C
Cold junction compensation	automatic, -10...80 °C
RTD line compensation	automatic, up to 2 x 25Ω
Power supply	
Mains supply voltage	230 VAC or 115 VAC
SMPS voltage	90...250 VAC/DC
Isolated low voltage	12...24 VAC/DC or 24 VAC
Non-isolated low voltage	12...24 VAC/DC
Consumption	max. 2 VA
Indication and controls	
Digital display	3 LED indicators
LEDs	2 LEDs for output state
Keyboard	3 internal membrane keys

Operating conditions	
Operating temperature	-10...65 °C
Operating humidity	0...85 %RH
Design and materials	
Front dimensions [mm]	144x72
Mounting	panel
Panel cutout [mm]	136x66
Mounting depth [mm]	92
Display digits	3
Display digit height [mm]	45
Maximum weight [g]	600
Protection, front/terminals	IP54/20
Case material	plastic
Wiring (terminals)	plug-in

HOW TO ORDER: **M3D2 - 1 - 2 - 3 - 4**

BASIC MODEL

M3D2

1) POWER SUPPLY

- 1 95-250 VAC
- 2 12-24 VDC none isolated
- 3 12-24 VDC isolated
- 4 24 VAC

2) SERIAL INTERFACE

- 1 none
- 2 RS485

3) SERIAL PROTOCOL

- 1 none
- 2 ASCII
- 3 ASCII for "PolyMonitor"

4) CUSTOMER SPECIFIED INPUT SIGNAL

- 1 none
- 2 customer Linear signal (specify)

Ordering examples: **M3D2 - 3 - 2 - 2 - 1**
M3D2 - 1 - 1 - 1 - 1 - (-5 to 14 = 4-20mA)

Note: Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing.
 Modifications may take place and materials specified may be replaced by others without prior notice.

