

Overview of new developments in the field of TFT indicators, top hat rail devices and large-size indicators

Designed for connecting various sensors and robust industrial use!

TFT1-13: TFT triple display, -1999...9999 digits for panel-mounting, housing 96x48x47 mm (BxHxD)

Measuring inputs: 3x direct voltage/direct current (0-10 VDC, 0/4-20 mA)

Standards: digit height approx. 9 mm, protection class IP65, plug-in terminal

Software features: minimum/maximum memory, optical switching point indication, selectable colours for measurand and background (red, green, white, black or orange), 9-points linearisation, adjustable physical units, and many more

Options: 2 relay outputs, interface RS485 (Modbus protocol) in preparation

Accessories: PC-based configuration software with CD and USB adapter



TFT1-11: TFT display, -1999...9999 digits for panel-mounting, housing 96x48x47 mm (BxHxD)

Measuring inputs: direct voltage, direct current, Pt100(0), thermocouple, frequency, rotational speed, counter

Standards: 2 relay outputs, digit height approx. 15 mm, protection class IP65, plug-in terminal

Software features: minimum/maximum memory, optical switching point indication, selectable colours for measurand and background (red, green, white, black or orange), adjustable identification of metering point and signalling, 9-points linearisation and many more

Options: interface RS485 (Modbus protocol)

Accessories: PC-based configuration software with CD and USB adapter



MH-1U: LED display, -199...999 for top hat rail mounting, housing 22.5x117.2x107 mm (BxHxD)

Measuring inputs: Direct voltage, direct current, Pt100(0), thermocouple, frequency, rotational speed, counter

Standards: Digit heights approx. 7 mm, red, indication internal -1999...999 digits, multi power voltage supply unit

Software features: minimum/maximum memory, optical switching points, 9-points linearisation and many more

Options: interface RS485 (Modbus protocol), Bluetooth and data logger (in preparation), analog output selectable 0/4-20 mA, 0-10 VDC, sensor supply incl. digital input, 2 relay outputs and/or 2 PhotoMos outputs

Accessories: PC-based configuration software with CD and USB adapter



MG-AU: LED large-size indicator in wall mounting or panel enclosure -1999...9999 digits (optional 6 or 8 digits) for indoor and outdoor use

Measuring inputs: Direct voltage, direct current, Pt100(0), thermocouple, frequency, rotational speed, counter

Standards: red ultra-bright LED with automatic dimming, 2 relay outputs, digit height approx. 57 mm, 100 mm (200 mm on request), pressure equalisation for air ventilation and air vent, multi power voltage supply unit, protection class IP65

Software features: minimum/maximum memory, taring function, 9-points linearisation and many more

Options: Interface RS232/RS485 (Modbus protocol), analog output selectable 0/4-20 mA, 0-10 VDC, sensor supply incl. digital input, fix cable outlet (m)



Product overview – Novalties

Product line	TFT1-13	TFT1-11	MH-1U	MG
Dimensions	B96xH48xD25 mm (with transformer 42 mm, with plug-in terminal 47 mm)	B96xH48xD25 mm (with transformer 42 mm, with plug-in terminal 47 mm)	B22,5 x H117,2 x T107 mm	B284xH110xT52 mm, B470xH155xT58 mm
Display colour	Red, green, white, back or orange (selectable)	Red, green, white, back or orange (selectable)	Red	Red (green, blue, orange on request)
Display	3x -1999 bis 9999, full-graphic TFT-display	-1999 bis 9999, full-graphic TFT-display	3-digit -199...999 (internal -1999...9999)	4-digit -1999...9999 (6/8)
Digit height	9 mm	15 mm	7 mm	57 mm, 100 mm (200 mm on request)
Protection class	Front side IP65 standard, rear side IP00	Front side IP65 standard, rear side IP00	-	IP65
Resolution	14 bit at 1 second measuring time	14 bit at 1 second measuring time	14 bit at 1 second measuring time	14 bit at 1 second measuring time
Measuring input selectable via terminal				
Voltage/Current	0...10 V Ri > 100 kOhm / 0/4...20 mA Ri = ~125 Ohm	0...10 V Ri > 100 kOhm, 0...2 V Ri ≥ 10 kOhm, 0...1 V Ri ≥ 10 kOhm, 0...50 mV Ri ≥ 10 kOhm / 0/4...20 mA Ri = ~125 Ohm	0...10 V Ri > 100 kOhm, 0...2 V Ri ≥ 10 kOhm, 0...1 V Ri ≥ 10 kOhm, 0...50 mV Ri ≥ 10 kOhm / 0/4...20 mA Ri = ~125 Ohm	0...10 V Ri > 100 kOhm, 0...2 V Ri ≥ 10 kOhm, 0...1 V Ri ≥ 10 kOhm, 0...50 mV Ri ≥ 10 kOhm / 0/4...20 mA Ri = ~125 Ohm
Pt100 3-wire	no	-50...200°C / -58...392°F -250...850°C / -328...1562°F	-50...200°C / -58...392°F -250...850°C / -328...1562°F	-50...200°C / -58...392°F -250...850°C / -328...1562°F
Pt1000 2-wire	no	-250...850°C / -328...1562°F	-250...850°C / -328...1562°F	-250...850°C / -328...1562°F
Thermocouple	no	Type L, J, K, B, S, N, E, T, R	Type L, J, K, B, S, N, E, T, R	Type L, J, K, B, S, N, E, T, R
Frequency	no	0-10 kHz, NPN 0-3 kHz, PNP 0-1 kHz	0-10 kHz, NPN 0-3 kHz, PNP 0-1 kHz	0-10 kHz, NPN 0-3 kHz, PNP 0-1 kHz
Rotational speed	no	0...9999 1/min, 0...9999 1/min, 0,001 1/min	0...9999 1/min, 0...9999 1/min, 0,001 1/min	0...9999 1/min, 0...9999 1/min, 0,001 1/min
Counter	no	0...9999 (prescaler up to 1000)	0...9999 (prescaler up to 1000)	0...9999 (prescaler up to 1000)
Supply				
230 VAC	yes	yes	no	no
15-40 VDC galv. isolated / 20-30 VAC 50/60 Hz, ≤ 10 VA	no	no	yes	no
24 VDC galv. isolated	yes	yes	yes	no
100-240 VAC/DC	no	no	yes	yes
18-36 VDC galv. isolated	no	no	no	yes
Output				
Analog output	no	no	0/4-20 mA, 0-10 VDC optional	0/4-20 mA, 0-10 VDC optional
Sensor supply	no	no	24 VDC/50 mA optional	24 VDC / 50 mA / 10 VDC / 20 mA optional
Switching output	2 relay (changer) optional	2 relay (changer)	2 Relay output /PhotoMos outputs optional	2 relay outputs (normally open contact) optional
Interface	RS485 optional (relay not applicable)	RS485 optional (relay not applicable)	RS232/RS485, Bluetooth, data logger optional	RS232/RS485 optional
Digital input	no	no	only with sensor supply optional	only with sensor supply optional

Update: 01/2019