

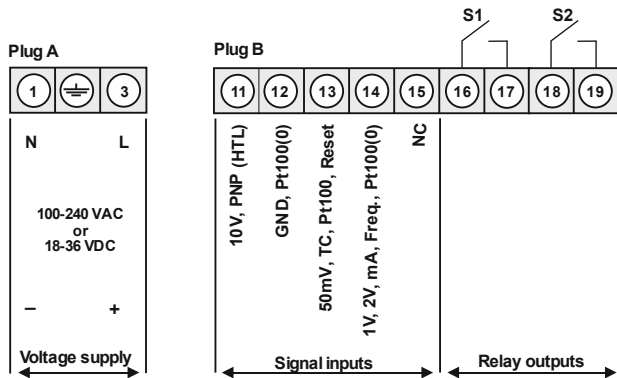
# MG-AU – 4-digit large-size indicator for indoor use

**Multifunction meas. input: Direct voltage, direct current, Pt100(0), thermocouple, rotational speed, counter**

- red display of von -1999...9999 digits (optional 6 digits)
- digit height 57 mm, 100 mm or 200 mm
- protection class IP65
- wall mounting housing
- membrane for pressure equalization for air ventilation and air vent
- display adjustment via factory setting or directly on the sensor signal
- minimum/maximum value recording
- 9 additional, adjustable supporting points
- display flashing at threshold value exceedance / undercut
- tara function
- brightness sensor
- programming interlock via access code
- 2 switching points (closer)
- optional: fix cable outlet 2m, 5m or 10m
- optional: connection via external keypad
- on request: communication via Bluetooth
- accessories: PC-based configuration kit PM-TOOL with USB-plug



## • Multifunction measuring input



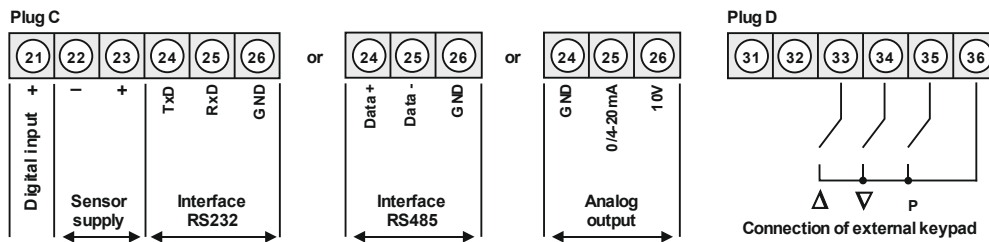
57 mm	100-240 VAC
57 mm	18-36 VDC
100 mm	100-240 VAC
100 mm	18-36 VDC
200 mm	100-240 VAC
200 mm	18-36 VDC

**ORDER NUMBER**                      **EUR**  
(without options)

### Built-on enclosure

<b>MG-AUR41.000X.S12xO</b>	<b>720.10</b>
<b>MG-AUR41.000X.712xO</b>	<b>773.10</b>
<b>MG-AUR42.000X.S12xO</b>	<b>1.037.80</b>
<b>MG-AUR42.000X.712xO</b>	<b>1.101.40</b>
<b>MG-AUR45.000X.S12xO</b>	<b>2.192.10</b>
<b>MG-AUR45.000X.712xO</b>	<b>2.245.10</b>

### Options:



## • Parameterisation software

PC-based configuration software PM-TOOL, for devices without keypad or for a simple parameterization of standard devices, incl. USB adapter.

**ORDER NUMBER**                      **EUR**

**PM-TOOL-USB**                              **30.70**



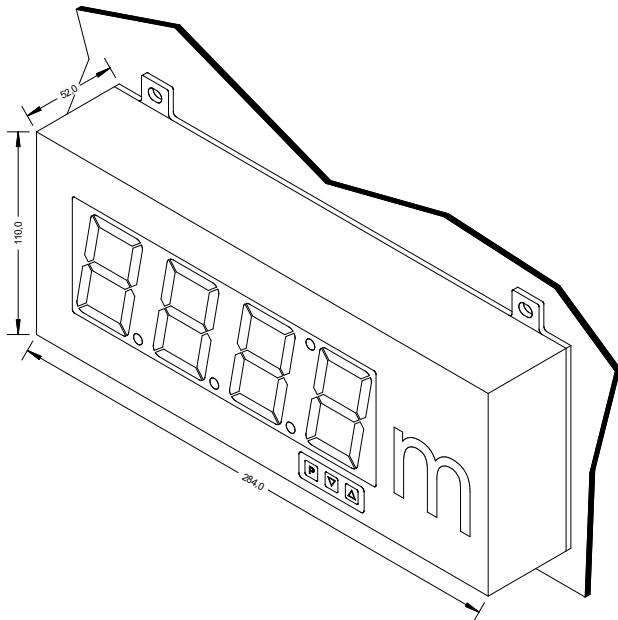
• Order key options

M	G	-	A	U	R	4	1	0	0	0	X	S	1	2	x	O		
M	G	-	A	U	R	4	1	0	0	0	X	7	1	2	x	O		Supply 100-240 VAC / DC ± 10%
M	G	-	A	U	R	4	1	0	0	0	X	7	1	2	x	O		Supply 18-36 VDC galv. isolated
																		EUR
																	D	Dimension: maximum 3-digit
																	E	Connection for external keypad (plug D)
																	X	Analog output 0/4-20 mA, 0-10 VDC 16 bit*
																	2	Sensor supply 10 VDC/20 mA, digital input
																	3	Sensor supply 24 VDC/50 mA, digital input
																	3	Interface RS232 / Modbus protocol*
																	4	Interface RS485 / Modbus protocol*
																	B	Communication via Bluetooth
																	1	57 mm digit height
																	2	100 mm digit height
																	3	200 mm digit height
																	6	Number of digits: 6 – 57 mm
																	6	Number of digits: 6 – 100 mm
																	G	Green LED
																	B	Blue LED
																	O	Orange LED
																	B	Installation housing 57 mm, max. 4-digit
																	B	Installation housing 100 mm, max. 4-digit

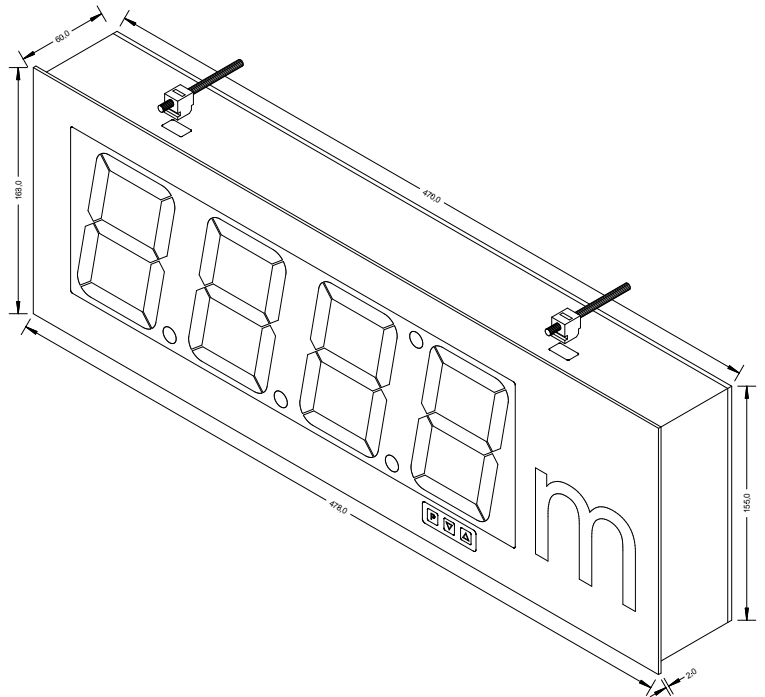
\*Option analog output cannot be combined with interface RS232/RS485.

• Fixing drawing for installation and built-on housing

Built-on housing



Built-in housing



• **Technical data**

<b>Dimensions</b>	Built-on housing	57 mm display: 284 mm x 110 mm x 52 mm (BxHxD) 100 mm display: 470 mm x 155 mm x 58 mm (BxHxD) 200 mm display: 998 mm x 276 mm x 58 mm (BxHxD)	
	Installation housing	57 mm display: 292 mm x 118 mm x 54 mm (BxHxD) 288 <sup>-0.5</sup> mm x 114 <sup>-0.5</sup> mm (BxH) = panel cut-out 100 mm display: 478 mm x 163 mm x 60 mm (BxHxD) 474 <sup>-0.5</sup> mm x 159 <sup>-0.5</sup> mm (BxH) = panel cut-out	
<b>Fixing</b>	Built-on housing	via fixing clamp on the rear panel	
<b>Protection class</b>	Built-on housing	IP65 complete	
<b>Connection</b>	Built-on housing	PG-screwing, rear side of housing	
	plug (internal)	Plug A: 3-pole plug-in terminal for voltage supply	
		Plug B: 9-pole plug-in terminal for measuring signal and switching outputs	
		Plug C: 6-pole plug-in terminal for analog output, sensor supply, digital input, interface (optional) Plug D: 6-pole plug-in terminal for external keypad (optional)	
<b>Weight</b>	57 mm display (4-digit): approx. 1.3 kg 100 mm display (4-digit): approx. 2.7 kg 200 mm display (4-digit): approx. xx kg		
<b>Display</b>	Display	Power LEDs	
	Digit height	57 mm, 100 mm	
	Display colour	red, green (orange, blue on request)	
	Number of digits	4, optional 6 digits	
	Display range	-1999 to 9999	
	Overflow	horizontal bars at the top	
	Underflow	horizontal bars at the bottom	
	Display time	0.01 to 2.0 seconds	
	Application area	Indoor / outdoor	
<b>Measuring input</b>			
<b>Signal</b>	<b>Measuring range</b>	<b>Measuring span</b>	<b>Resolution</b>
Voltage	0...10 V Ri > 100 kOhm	0-12 V	≥ 14 bit
Voltage	0...2 V Ri > 10 kOhm	0-2.2 V	≥ 14 bit
Voltage	0...1 V Ri > 10 kOhm	0-1.1 V	≥ 14 bit
Voltage	0...50 mV Ri > 10 kOhm	0-75 mV	
Current	4...20 mA Ri = ~125 Ohm	1-22 mA	
Current	0...20 mA Ri = ~125 Ohm	0-22 mA	
Pt100-3-wire	-50...200°C / -58...392°F		0.1°C / 0.1°F
Pt100-3-wire	-200...850°C / -328...1562°F		1°C / 1°F
Pt1000-2-wire	-200...850°C / -328...1562°F		1°C / 1°F
Thermo K	-270...1350°C / -454...2462°F		1°C / 1°F
Thermo S	-50...1750°C / -328...3182°F		1°C / 1°F
Thermo N	-270...1300°C / -454...2372°F		1°C / 1°F
Thermo J	-170...950°C / -274...1742°F		1°C / 1°F
Thermo T	-270...400°C / -454...752°F		1°C / 1°F
Thermo R	-50...1768°C / -58...3214°F		1°C / 1°F
Thermo B	80...1820°C / 176...3308°F		1°C / 1°F
Thermo E	-270...1000°C / -454...1832°F		1°C / 1°F
Thermo L	-200...900°C / -328...1652°F		1°C / 1°F
Frequency	0...10 kHz		0.001 Hz ± 1
NPN	0...3 kHz		0.0001 Hz ± 1
PNP	0...1 kHz		0.0001 Hz
Rotational speed	0...9999 1/min		0.0001 1/min
Counter	0...9999 (prescaler up to 1000)		
Pulse input	TTL low <2 V / High >3 V		
	HTL/PNP Low <6 V / High >8 V		
	NPN Low <0.8 V / High via resistance		
	Namur Low <1.5 mA / High >2.5 mA		
<b>Counter reset</b>	active < 0.8 V		
<b>Digital input</b>	< 2.4 V OFF, 10 V ON, max. 30 VDC, RI~ 5 kOhm		
<b>Output</b>	Sensor supply	24 VDC / 50 mA incl. digital input 10 VDC / 50 mA incl. digital input	
	Analog output	0/4-20 mA, 0-10 VDC 16 bit	
	Relay	2x normally open contacts 30 VDC / 2 A resistive load	
	Interface	RS232 Modbus protocol RS485 Modbus protocol Bluetooth module 4.0	
<b>Measuring error</b>	Standard	0.2% of measuring range ± 1 digit	
	Pt100 / Pt1000	0.5% of measuring range ± 1 digit	
	Thermocouple	0.3% of measuring range ± 1 digit	
<b>Accuracy</b>	Reference junction	± 1°C	
	Temperature drift	100 ppm/K	
	Measuring time	0.01 to 2.0 seconds	
	Measuring rate	approx. 1/s with temperature sensor, approx. 100/s with standard signals	

	Measuring principle	U/F-conversion
	Resolution	approx. 14 bit at 1 sec measuring time
<b>Power pack</b>	Supply	100-240 VAC 50/60 Hz, DC ±10% 18-36 VDC, galv. isolated
	Power consumption	maximum 50 VA, max. 200mm display
<b>Memory</b>	EEPROM	Data life ≥100 years at 25°C
<b>Ambient conditions</b>	Working temperature	-20...+50°C with a supply of 100-240 VAC, -10...+50°C with a supply of 24 VDC
	Storing temperature	-30...+70°C
	Weathering resistance	rel. humidity ≤75 % on years average without dew
<b>EMV</b>	EN 61326	
<b>CE-sign</b>	conformity according to 2014/30/EU	
<b>Safety requirements</b>	according to low voltage directive 2014/35/EU; EN 61010; EN 60664-1	

• **Order key**

	M	G	-	A	U	R	4	1	0	0	0	X	S	1	2	x	O		
<b>Basic type M-line</b>																			<b>Dimension</b>
																			<input type="checkbox"/> without
<b>Large-size indicator</b>																			<input type="checkbox"/> maximum 3 characters
<b>Housing type</b>																			<b>Version</b>
Built-on housing				A															<input type="checkbox"/> Internal version
<b>Display type</b>																			<b>Switching points</b>
Multifunction measuring input					U														<input type="checkbox"/> 2 switching points
<b>Display colour</b>																			<b>Operation</b>
Red						R													<input type="checkbox"/> Keys at the front
Green (on request)						G													<input type="checkbox"/> Connection for external keypad
Blue (on request)						B													
Orange (on request)						O													
<b>Number of digits</b>																			<b>Supply voltage</b>
4-digit							4												<input type="checkbox"/> 18-36 VDC galv. isolated
6-digit							6												<input type="checkbox"/> 100-240 VAC
<b>Digit height</b>																			<b>Measuring input</b>
57 mm																			<input type="checkbox"/> Direct voltage, direct current, Pt100(0), thermocouple, counter, frequency
100 mm																			
200 mm																			
<b>Interfaces</b>																			<b>Analog output*</b>
none																			<input type="checkbox"/> without
RS232 Modbus protocol																			<input type="checkbox"/> 0/4-20 mA, 0-10 VDC
RS485 Modbus protocol																			
Bluetooth module																			
																			<b>Sensor supply</b>
																			<input type="checkbox"/> none
																			<input type="checkbox"/> 10 VDC / 20 mA
																			<input type="checkbox"/> 24 VDC / 50 mA

The option „Analog output“ cannot be combined with option “Interface”!