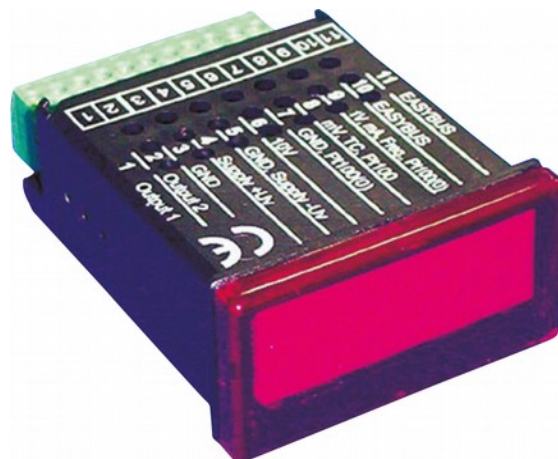


SGIA

Universal Indicator and Control Unit for panel mounting

- compact design, 48 x 24 mm
- input for current, voltage, frequency or temperature
- 4-digit LED display
- 2 alarm contacts
- EASY Bus interface



Description:

The digital built-in measuring instrument type SGIA is used for display and processing of process signals of various sensors. The device is microprocessor controlled and therefore freely programmable.

Sensors with analogue output (current or voltage signals), frequency output (measuring turbines or impeller flow meters) as well as resistance thermometers and thermocouples can be connected.

Typical applications:

The large, 10 mm high LED display and transistor switching outputs make the SGIA the ideal secondary instrumentation for all types of process measurement systems.

Due to the small installation dimensions of only 48x24 mm, the SGIA can also be used in confined spaces.

Dimensions:

Housing dimensions:	24 x 48 x 65 mm (H x W x L)
Panel cut-out:	21,7 x 45 mm (H x W)
Mounting:	by VA spring clips, possible panel thickness 1-10 mm

Technical Data:

Power supply:	9...28 VDC
Display:	4-digit, 7-segment LED, 10 mm high
Accuracy:	norm signal: < 0,2 % FS ± 1 digit at 0–50mV: < 0,3 % FS ± 1 digit, resistance thermometers: < 0,5 % FS ± 1 digit
Switch output:	2 switching outputs not galvanically isolated
Interface:	EASY bus interface, galvanically isolated
Protection class:	IP54 (front side)
Housing:	glass fibre reinforced PPE, viewing classes polycarbonate

Electrical Connections:

11	EASY Bus interface
10	EASY Bus interface
9	input: 0-1 V, 0-2 V, mA, frequency, Pt100, Pt1000
8	input: 0–50 mV, thermocouple, Pt100
7	input: GND, Pt100, Pt1000
6	input: 0-10 V
5	power supply GND
4	power supply + Uv
3	switch output GND
2	switch output 2
1	switch output 1

Note: terminals 3, 5, 7 are electrically connected in the device.

Order Code:

Order number:	SGIA. 20. 1
Universal indicator and control unit for panel mounting	
Power supply: 20 = 9...28 VDC	
Protection class: 1 = IP54	

Electrical Connections:

Mess-art	Input signal	Measuring range	Resolution	Comment
voltage signal	0...10 V 0...2 V 0...1 V 0...50 mV	0... 10 V 0... 2 V 0... 1 V 0... 50 mV		Ri >/ = 300 kOhm Ri >/ = 10 kOhm Ri >/ = 10 kOhm Ri >/ = 10 kOhm
current signal	4...20 mA 0...20 mA	4...20 mA 0...20 mA		Ri ca. 125 Ohm Ri ca. 125 Ohm
resistance	Pt100 (0.1 °C) Pt100 (1 °C) Pt1000	–50.0...+ 200 °C (resp. –58...+392 °F) –200...+ 850 °C (resp. –328...+1562 °F) –200...+ 850 °C (resp. –328...+1562 °F)	0.1 °C resp. °F 1 °C resp. °F 1 °C resp. °F	3-wire connection max. per. line resistance 20 Ohm as above 2-wire connection
thermocouple	NiCr-Ni type (K) Pt10Rh-Pt type (S) NiCrSi-NiSi type (N) Fe-CuNi type (J) Cu-CuNi type (T)	–270...+1350 °C (resp. –454...+2462 °F) –50...+1750 °C (resp. –58...+3182 °F) –270...+1300 °C (resp. –454...+2372 °F) –170...+950 °C (resp. –274...+1742 °F) –270...+400 °C (resp. –454...+752 °F)	1 °C resp. °F 1 °C resp. °F 1 °C resp. °F 1 °C resp. °F 1 °C resp. °F	
frequency	TTL signal switching contact NPN switching contact PNP	0 Hz...10 kHz 0 Hz...3 kHz 0 Hz...1 kHz	0.001 Hz 0.001 Hz 0.001 Hz	internal Pull-Up resistor (approx. 11 kOhm against 3,3 V) is switched on internal Pull-Down resistor (approx. 11 kOhm against GND) is switched on
speed	TTL signal switching contact NPN, PNP	0...9999 U/min	0.001 U/min	switchable prescaler (1–1000), pulse frequency: max 600000 Imp/min*
Down counter, upwards counter	TTL signal, switching contact NPN, PNP	0...9999 with prescaler: 9 999 000		switchable prescaler (1–1000), pulse frequency: max 10000 Imp/sec*

*= switching contact according to frequency input