

## DIGITAL-PANEL-MOUNTED DISPLAY MODULES for all applications

- 2 temperature modules (covering temperature ranges from -50 up to +1150° C)
- 4 pressure modules for barometer, vacuum meter, manometer for absolute pressure, over/under pressure and pressure difference measurements. Pressure range up to 10 bar
- one voltmeter module with 3 integrated voltage ranges

### Common specification for all modules:

Display: 3½-digit LCD display, 13mm high (±1999 digit), scan rate: 3 meas. per second, operating temperature: 0 to 50°C, atmospheric humidity: 0 to 85%RH (non-condensing), storage temperature: -10 to +70°C, current supply: 9 - 12 V DC, electrical connection: via soldering pin, dimensions: 38 x 76 x 22 mm (H x W x D), panel-cutout: 36<sup>+0.5</sup> x 73.2<sup>+0.5</sup>mm (H x W), panel thickness: max. up to 9.5mm. snap-on frame protruding only 1mm over front plate - professional design, 3mm thick anti-reflex screen

### TEMPERATURE

#### GPT 180

TEMPERATURE MODULE for semiconductor sensor KTY 83-110

Range: -50.0 up to +175.0° C / Resolution: 0.1° C

Accuracy: approx. 1% f.s. / Power consumption: approx. 1 mA

Suitable sensors KTY 83-110: please refer to pages 109 and 111

#### GPT 1155

TEMPERATURE MODULE for thermocouple NiCr-Ni (type K)

Range: -50 up to +1150° C / Resolution: 1° C

Accuracy: (at nominal temperature = 25°C) better than 1 % from -20 up to +550 and from 920 up to 1150° C, 550 up to 920 better than 1.5%

Power consumption: approx. 0.35 mA

Suitable sensors type NiCr-Ni (type K) p.r.t. pages 103 - 107, 112 - 113

GTU 300/152 wire sensor with soldering pin plug

### Pressure

#### GPD 15 ABS

DIGITAL BAROMETER / VACUUM METER MODULE (sensor not included)

Range: 0 to 1100 mbar (hPa) absolute / Resolution: 1 mbar

Accuracy module: 1 mbar ±1 digit

Accuracy sensor: (sensor not included in scope of supply):

±0.2% (typical) for linearity and hysteresis, ±0.4% for temperature drift from 0 to 50° C (typ. values for sensors compensated to module)

Power consumption (incl. sensor) approx. 3.5 mA

Suitable sensors: (please order separately)

SCX 15 ANC (pressure sensor, loose)

SCX 15 ANC/G (pressure sensor with housing, 1m connection cable)

#### GPD 05 REL

DIGITAL MANOMETER for over/under pressure and pressure difference (sensor not included)

Meas. range: -100,0 to +199,9 mbar relative (referring to ambient pressure)

Resolution 0,1 mbar / Accuracy module 0,1 mbar ±1 digit

Accuracy sensor and power consumption as above

Suitable sensors: (please order separately)

SCX 05 DNC (pressure sensor, loose)

SCX 05 DNC/G (pressure sensor with housing, 1m connection cable)

#### GPD 30 REL

DIGITAL MANOMETER for over/under pressure and pressure difference (sensor not included)

Meas. range: -1000 to +1999 mbar relative (referring to ambient pressure)

Resolution 1 mbar / Accuracy module 1 mbar ±1 digit

Accuracy sensor and power consumption as above

Suitable sensors: (please order separately)

SCX 30 DNC (pressure sensor, loose)

SCX 30 DNC/G (pressure sensor with housing, 1m connection cable)

#### GPD 150 REL

DIGITAL MANOMETER for over/under pressure and pressure difference (sensor not included)

Range: -1.00 up to 10.00 bar relative (referring to ambient pressure)

Resolution 0.01 bar Accuracy module 1 mbar ±1 digit

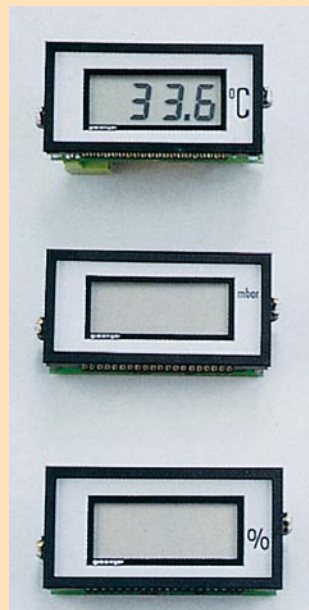
Accuracy sensor and power consumption as above

Suitable sensors: (please order separately)

SCX 150 DNC (pressure sensor, loose)

SCX 150 DNC/G (pressure sensor with housing, 1m connection cable)

## DIGITAL DISPLAY for all measuring transducers 4 to 20 mA 2-wire, no auxiliary power required



Digital panel module without auxiliary energy

- for use in 4 to 20 mA output circuits of measuring transducers
- WITHOUT EXTERNAL AUXILIARY SUPPLY
- high operating reliability
- Cost reduction as power supplies and their cables are no longer required

### GTA 0420 (standard range)

Large, high-contrast 3 1/2 digit LCD, 12.7 mm high; to either directly display loop current or convert it into any desired value such as temperature, pressure, fill level, humidity, travel, weight, height, liquid flow, ppm, mg/l, % sat., etc..

Snap-on, industrial panel-mounting type, anti-reflex screen 3 mm thick (not to be compared with unprotected glass covered display as used with cheap modules!)

Minimum size: 38 x 76 x 22 mm (H x W x D). Devices can be stack-mounted at a distance of 38 mm.

Standard printings available, eg. °C, %, V, mbar, bar, otherwise neutral.

### Specification:

Input signal: 4 .. 20 mA, 2-wire

Display ranges: 0,0 ... 100,0; 0,0 ... 199,9; -50,0 ... +50,0 (standard); any display range desired against upcharge (p.r.t. options)

Decimal point: any place (soldering jumper)

Fine tuning: starting point at 4 mA and end point at 20 mA can each be shifted by ±50 digits

Display: 3½ digit LCD with ±1999 digits, 13 mm high

Scanning rate: 3 measurements per second

Voltage load: approx. 4,7 V (standard - connection wrong-polarity protected) optional: approx. 3,5 V (without polarity protection) - upon request

Accuracy: (at nominal temperature = 25°C) ±0.1% ±1digit

Temperature coefficient: 100 ppm / K

Operating temperature: 0 to 50 °C

Atmospheric humidity: 0 to 85 %RH (non-condensing)

Storage temperature: -10 to +70°C

Dimensions: 38 x 76 x 22 mm (H x W x D)

Panel cutout: 36<sup>+0.5</sup> x 73.2<sup>+0.5</sup> mm (H x W)

Panel thickness: max. up to 9.5mm.

### Options:

Any measuring range desired (against upcharge)

(no upcharge for orders as of 10 pieces of the same range)

Further displays without auxiliary supply: p.r.t. page 42, 56, 57

### VOLTAGE

#### GPV 220

DIGITAL VOLTMETER, 3 integrated voltage ranges - others can be realised by means of an external voltage divider (eg for mains voltage 230 V etc.)

Ranges: ±199.9 mV DC, ±1999 mV DC, ±19.99 V DC integrated; (±199.9 V DC or 1999 V DC can be realised by means of an external voltage divider)

Decimal point: any place selectable

Resolution: up to 100µV / Input impedance: 100MΩ resp. 1MΩ

Accuracy: 0.1% ±1 digit / T.C. value: 100 ppm/K

Power consumption: approx. 100µA only (approx. 3000 hours with normal 9V-battery)