

## 2011 Panelmeter for process inputs

- Process input 0/4..20 mA, 0..5/10 V, potentiometer
- 5-digit processor-based LED display
- Sensor selection and scaling via front panel keys
- 2 adjustable alarm limits with change-over contacts
- Alarm reset, display hold and taring by external contact
- Wide power supply range 85..240 VAC or 12..32 VDC/ 24 VAC
- Separate passwords for alarms and configuration
- Front panel protection IP65



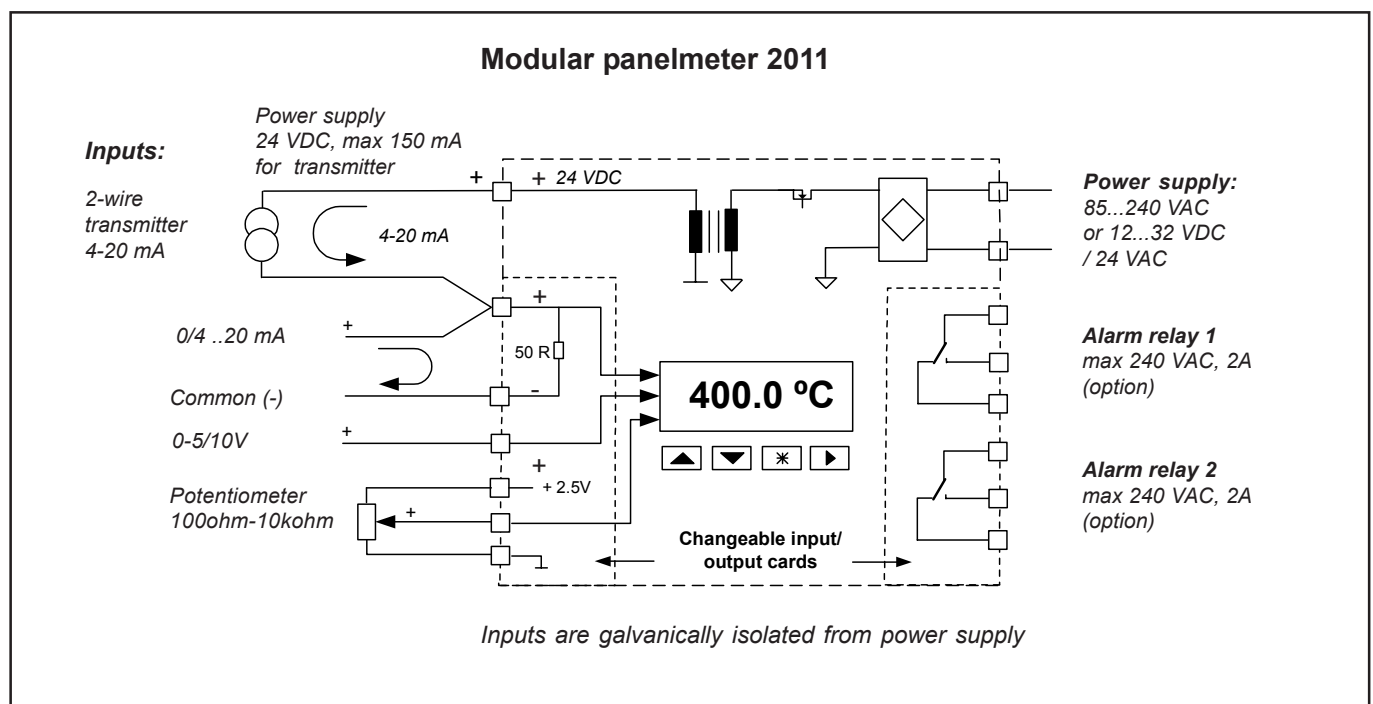
The panelmeter 2011 is designed for usual process inputs 0/4..20 mA, 0..5/10 V and for potentiometers 100 ohm.. 10 kohm. Selection of the sensor type and display scaling is easy via front panel keys. 2 alarm relays with change-over contacts are available as an option. Alarm limits and hysteresis are freely selectable via front panel keys. The display can be damped by a digital filter if necessary. The number of decimals is selectable. The brightness of the display can be selected as well.

There are two power supply alternatives: one for line voltage 85..240 VAC and the other 12..32 VDC or 24 VAC, galvanically isolated from input and output. The panelmeter provides a voltage supply of 24 VDC, 150 mA for sensors.

Analog conversion is done by a 15-bit AD-converter (resolution 1/32000) and the number of measurements is 7 per second. Separate passwords can be set for access to the configuration menu and alarms. Front panel protection rating is IP65.

The panelmeter series 2000 is very flexible and easy to modify by changing input cards for different kinds of sensors, such as temperature sensors, pulse sensors, serial inputs etc. The modification does not require any calibration. The optional cards are the same for all the instruments in this product family. Each panelmeter type has its own datasheet.

Separate field enclosures can be supplied for 1 to 3 panelmeters. The 2011 is also available in the field display series, model 2800-2011.



# Technical specifications:

**Process inputs:** 0..20 mA, 4..20 mA, 0..5 V and 0..10V  
 Display scaling on the whole display range  
 Input resistance current input 50Ω, voltage input >1 MΩ  
 Accuracy 0,05 % FS  
 Linearity 0,01 % FS  
 Supply for transmitter 24 VDC, max. 150 mA

**Potentiometer input:** 100Ω -10kΩ  
 Reference voltage 2,5 V, max load 25 mA  
 Voltage stability 150 ppm/°C  
 Accuracy 0,05 % FS

**Alarms (optional):** 2 alarms with change-over contacts, relays max 240 VAC, 2 A, hysteresis 0..100%; Alarm reset: automatic or manual via front panel key or external contact. Choice of direction for the function of relays and signal lights.

**General:**  
 Display 5 digits, bright red (or green) LED; digit height 14,5 mm; brightness selectable

Input filter adjustable digital filter  
 External contact display hold, reset of alarms or display taring  
 AD-conversion 15 bits (1/32000)

Temperature effect 0,002 °C/°C  
 Operating temperature -10..+60 °C  
 Signal lights alarm levels 1 and 2  
 Terminals removable, wire 2,5 mm<sup>2</sup>  
 Case material plastic, colour black  
 Front panel protection IP65 with a rubber gasket  
 Power supply 85..240 VAC or 12..32 VDC / 24 VAC  
 Consumption 2,5 VA, 70..110 mA (24 VDC)  
 Weight 240 g

## How to order:

### 2011-REL2-24VDC

Type Alarm card REL2  
 Power supply 12..32 VDC, 24 VAC or 85..240 VAC

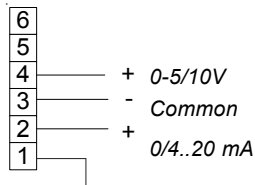


**Optional cards:**  
 Alarm card, 2 relays 2000-REL2  
 (When ordering a panelmeter, the "2000" of the card is left out.)

The panelmeter is also available with a green LED display: please specify 2011GR in the order code.

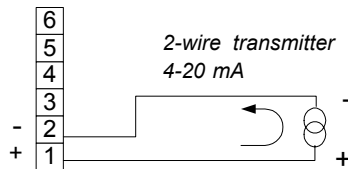
## Connections:

### Voltage / current-input

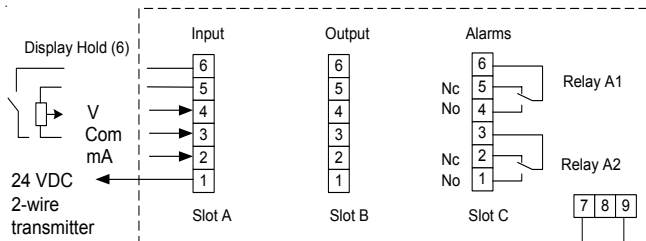
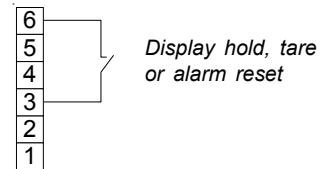


Power supply for transmitter 24 V max. 150 mA

### 2-wire transmitter



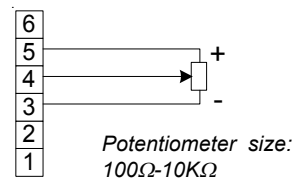
### External contact



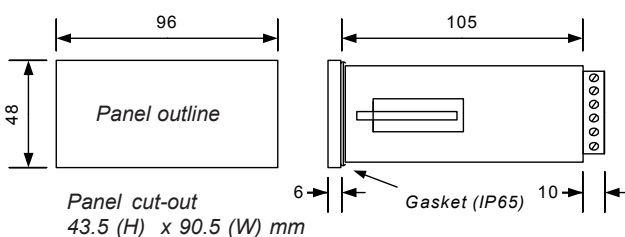
Slot C for optional alarm card.  
 Slot B not used.

Power supply 85..240 VAC (grey connector)  
 or 12..32 VDC (no polarity) or 24VAC (green connector)

### Potentiometer



## Case dimensions:



Changing cards is fast and simple without any tools

