

# Operating Manual for Digital-Panel-Mounted Pressure Modules

## GPD....

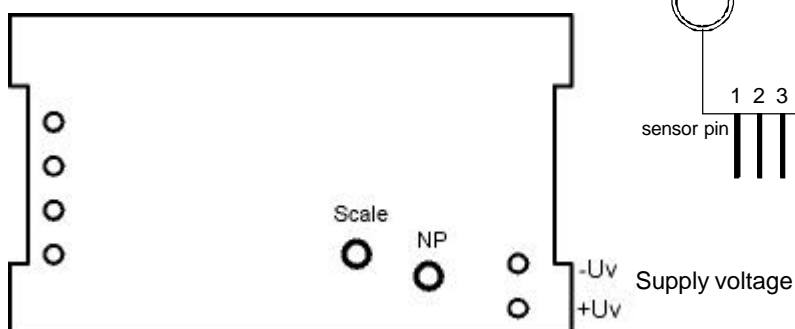


### Specification:

	GPD01REL	GPD30REL	GPD150REL	GPD15ABS
<b>Range:</b>	0 ... 70.0 mbar relative	-1000 ... 1999 mbar relative	-1.00 ... 10.00 bar relative	0 ... 1100 mbar absolute
<b>Resolution:</b>	0.1 mbar	1 mbar	10 mbar	1 mbar
<b>Sensor:</b>	SCX01DNC SCX01DN	SCX30DNC SCX30DN	SCX150DNC SCX150DN	SCX15ANC SCX15AN
<b>Accuracy: (device)</b>				
<b>Linearity:</b>	±0.1% ±1 digit			
<b>Temperature coefficient:</b>	0.05%/K			
<b>Display:</b>	approx. 13 mm high, 3½-digit LCD-display			
<b>Supply voltage:</b>	9 - 12 V DC, ≤4 mA (device incl. sensor)			
<b>Low battery warning:</b>	„BAT“ will be displayed automatically in the display as soon as the battery is low. => check supply voltage.			
<b>Operating temperature:</b>	0 to 50 °C			
<b>Atmospheric humidity:</b>	< 85 % r.F. (non-condensing)			
<b>Storage temperature:</b>	-20 to 80 °C			
<b>Dimension:</b>	38 x 76 x 22 mm (H x W x D)			
<b>Panel-cutout:</b>	36 <sup>+0.5</sup> x 73.2 <sup>+0.5</sup> mm (H x W)			
<b>Panel thickness:</b>	max. 9.5 mm			
<b>EMC:</b>	<p>The device corresponds to the essential protection ratings established in the Regulations of the Council for the Approximation of Legislation for the member countries regarding electromagnetic compatibility (2004/108/EG). Correspondent EN 61326 (appendix D, class B).</p> <p>The module is designed as installation module with limited noise immunity. Electromagnetic interference may cause increased deviations up to malfunction of the device. When connecting the instrument suitable measures against electromagnetic interference should be taken.</p>			

### Connection diagram: for sensor connection (at sensor design type: /G)

sensor pin ..DNC	..ANC	wire colour	meaning
2	2	brown	+Uv
3	5	white	Vin+
5	3	green	Vin-
4	4	yellow	-Uv



## How to Operate Device:

1. Make sure that module is operated with sufficient supply voltage. Wrong voltages cause faulty measurings.  
Therefore replace battery in time when module is battery operated (immediately after 'bat' appears).  
When using a power supply device please note that operating voltage has to be 9 to 12V DC. Do not apply overvoltage !!  
Cheap 12V-power supply device often have excessive no-load voltage..  
We, therefore, recommend using regulated voltage power supply devices.
2. Do not operate the module above the specified operating temperature.
3. Recalibration:  
The module is adjusted ex works to theoretical values. To get the best accuracy the module should be adjusted to the sensor connected.  
Calibration GPD...REL: - do not apply any pressure to the sensor. Adjust the offset value to 000 by means of potentiometer "NP".  
- apply a known reference pressure. Adjust the display to the reference by means of potentiometer "Scale".  
Calibration GPD...ABS: - apply a reference pressure as small as possible. Adjust the offset value to this value by means of potentiometer "NP".  
- do not apply any pressure to the sensor. Adjust the current abs. pressure by means of potentiometer "Scale".  
- repeat procedure until both display values are correctly adjusted.  
  
Please note: If no known reference pressure is available, just adjust "NP" potentiometer, not "Scale"!

## Safety instructions:

This device has been designed and tested in accordance with the safety regulations for electronic devices.

However, its trouble-free operation and reliability cannot be guaranteed unless the standard safety measures and special safety advises given in this manual will be adhered to when using the device.

1. Trouble-free operation and reliability of the device can only be guaranteed if the device is not subjected to any other climatic conditions than those stated under "Specification".  
If the device is transported from a cold to a warm environment condensation may cause in a failure of the function. In such a case make sure the device temperature has adjusted to the ambient temperature before trying a new start-up.
2. General instructions and safety regulations for electric, light and heavy current plants, including domestic safety regulations (e.g. VDE), have to be observed.
3. If device is to be connected to other devices (e.g. via PC) the circuitry has to be designed most carefully. Internal connection in third party devices (e.g. connection GND and earth) may result in not-permissible voltages impairing or destroying the device or another device connected.
4. If there is a risk whatsoever involved in running it, the device has to be switched off immediately and to be marked accordingly to avoid re-starting.  
Operator safety may be a risk if:
  - there is visible damage to the device
  - the device is not working as specified
  - the device has been stored under unsuitable conditions for a longer time.
 In case of doubt, please return device to manufacturer for repair or maintenance.
5. **Warning:** do not use these product as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.  
Failure to comply with these instructions could result in death or serious injury.

## Disposal Notice:

The device must not be disposed in the regular domestic waste.

Send the device directly to us (sufficiently stamped), if it should be disposed. We will dispose the device appropriate and environmentally sound.