

Operating Manual for Digital-Panel-Mounted Voltmeter

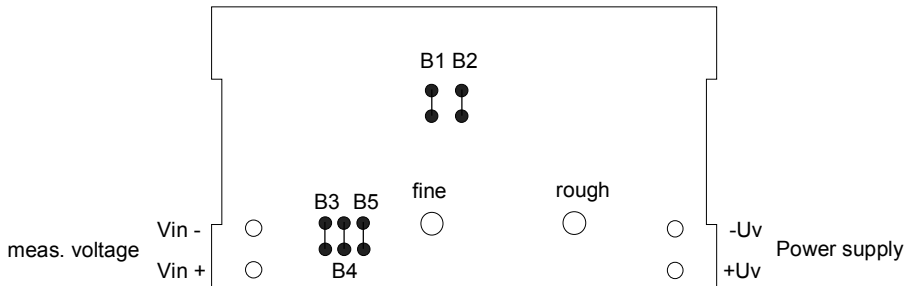
GPV 220



Specification:

Measuring range:	<input type="checkbox"/> $\pm 199.9 \text{ mV}$ <input type="checkbox"/> $\pm 1.999 \text{ V}$ <input type="checkbox"/> $\pm 19.99 \text{ V}$ <i>selectable via soldering bridge</i>
Decimal point:	<i>any place selectable via soldering bridge</i>
Input impedance:	$> 1 \text{ M}\Omega$ (at $\pm 199.9 \text{ mV}$ -range: $> 100 \text{ M}\Omega$)
Accuracy:	$\pm 0.1\% \pm 1 \text{ digit}$
Temperature coefficient:	100 ppm / K
Power supply:	8 - 12 V DC, approx. 100 μA
Display:	3½-digit, 12.7 mm high LCD-display
Scan rate:	3 measuring per second
Low voltage warning:	„BAT“ will be displayed automatically in the display as soon as the supply voltage is too low. => check supply voltage
Operating temperature:	0 to $+50^\circ\text{C}$, please avoid quick temperature changes, if possible
Storage temperature:	-20 to $+70^\circ\text{C}$
Atmospheric humidity:	$< 85\% \text{ RH}$ (non-condensing)
Dimensions:	38 x 76 x 22 mm (H x W x D)
Panel-cutout:	$36^{+0.5} \times 73.2^{+0.5}$ mm (H x W)
Panel thickness:	max. 9.5 mm
EMC:	<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:



Range selection:

No bridge set:	$\pm 199.9 \text{ mV}$
B1 selected:	$\pm 1.999 \text{ V}$
B1 u. B2 selected:	$\pm 19.99 \text{ V}$

Decimal point selection:

No bridge set:	no DP; max. display value: 1999
B3 selected:	DP 1 selected; display value: 199.9
B4 selected:	DP 2 selected; display value: 19.99
B5 selected:	DP 3 selected; display value: 1.999

The measuring device will be calibrated before leaving our works. If you want to recalibrate the module or if you want to adjust the module to your signal source you can do it with the both potentiometer “rough” and “fine”. Connect to the device a reference voltage and adjust the display to the accurate value by throwing the through the holes accessible potentiometer. (A zeropoint adjustment is not available)

⚠ Safety instruction:

This device has been designed and tested in accordance to the safety regulations for electronic devices. Faultless operation and reliability in operation of the measuring device can only be assured if the General Safety Measures and the devices specific safety regulation mentioned in this users manual are considered.

1. Trouble-free operation and reliability of the device can only be guaranteed if it 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 result 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. Standard regulations for operation and safety for electrical, light and heavy current equipment have to be observed, with particular attention paid to the national safety regulations (e.g. VDE 0100)
3. When connecting the device to other devices (e.g. the PC) the interconnection has to be designed most thoroughly, as internal connections in third-party devices (e.g. connection of ground with protective earth) may lead to undesired voltage potentials.
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

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 device, or in any other application where failure of the product could result in personal injury or material damage.

Failure to comply with these instructions could result in death or serious injury and material damage.

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.