

Operating Manual for Digital-Panel-Mounted Thermometer

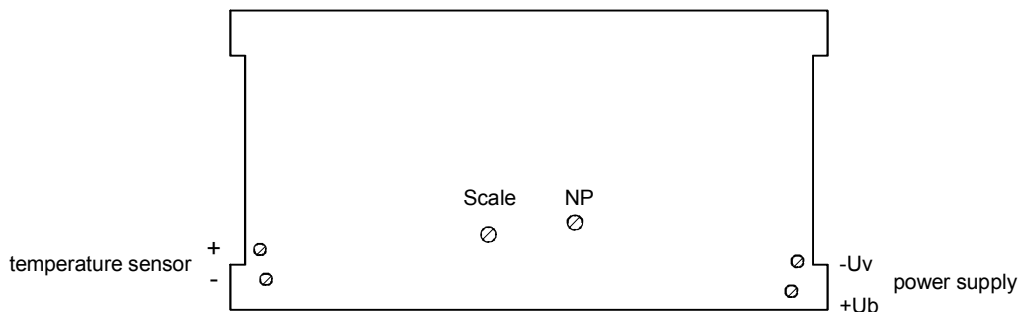
GPT 1155



Specification:

Measuring range:	-50 to +1150°C
Resolution:	1°C
Probe:	NiCr-Ni at DIN 43710
Accuracy:	device: -20 ... +550°C and +920 ... +1150°C: better 1% ± 1 digit +550 ... +920°C: better 1,5% ± 1 Digit, <i>For more detailed values please refer to attached correction table.</i>
Display:	approx. 13 mm high 3½-digit LCD-display
Power supply:	8 - 12 V DC, ≤ 0,35 mA
Low voltage warning:	„BAT“ will be displayed automatically in the display as soon as the supply voltage is to low. => check supply voltage
Operating temperature:	0 to +50°C, lease avoid quick temperature changes, if possible
Storage temperature:	-20 to +80°C
Atmospheric humidity:	< 85 % RH. (non-condensing)
Dimensions:	38 x 76 x 22 mm (H x W x D)
Panel-cutout:	36 ^{+0.5} x 73.2 ^{+0.5} mm (H x W)
Panel thickness:	max. 9.5 mm
EMC:	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). 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.

Connection diagram:



Recalibration:

The measuring device will be calibrated before leaving our works. A recalibration is, therefore, not necessary .
If you want to calibrate the device for an existing sensor, please proceed as follows (calibrate 0°C before scale as otherwise correct adjustment cannot be guaranteed):

Calibration point 0°C: Put ice cubes in a glass and pour cold water till ice cubes are almost covered.
Put sensor into glass, wait approx. 15 minutes, then stir water with a spoon-handle. Wait for stable value to be displayed, then turn zero point potentiometer (NP) by means of a screw driver till display shows "000".

Calibration point scale: Set display to a reference temperature value (e.g. clinical thermometer) using the left potentiometer (Scale).
Please note that boiling water should not be used as a temperature reference as the boiling temperature is dependent on the atmospheric pressure.

Correction table:

<u>Temperature</u>	<u>Display</u>	<u>Temperature</u>	<u>Display</u>	<u>Temperature</u>	<u>Display</u>	<u>Temperature</u>	<u>Display</u>
-50	-46	260	258	570	576	880	891
-40	-37	270	268	580	587	890	901
-30	-28	280	278	590	597	900	911
-20	-19	290	288	600	607	910	920
-10	-10	300	298	610	618	920	930
0	0	310	308	620	628	930	940
10	10	320	318	630	639	940	949
20	20	330	328	640	649	950	959
30	29	340	339	650	659	960	969
40	39	350	349	660	670	970	978
50	49	360	359	670	680	980	988
60	59	370	369	680	690	990	997
70	70	380	379	690	700	1000	1007
80	80	390	390	700	711	1010	1016
90	90	400	400	710	721	1020	1026
100	100	410	410	720	731	1030	1035
110	110	420	421	730	741	1040	1045
120	120	430	431	740	751	1050	1054
130	130	440	441	750	762	1060	1063
140	140	450	452	760	772	1070	1073
150	150	460	462	770	782	1080	1082
160	160	470	472	780	792	1090	1091
170	169	480	483	790	802	1100	1100
180	179	490	493	800	812	1110	1110
190	189	500	504	810	822	1120	1119
200	198	510	514	820	832	1130	1128
210	208	520	524	830	842	1140	1137
220	218	530	535	840	852	1150	1146
230	228	540	545	850	862	1160	1155
240	238	550	556	860	871	1170	1164
250	248	560	566	870	881	1180	1173

⚠ 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.

! INDEXLISTE - nicht mitdrucken !!

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