M e a s u r e m e n t & C o n t r o l I n s t r u m e n t s

DIGITAL THERMOMETER
(battery powered)
type Battemp

- *Pt RTD 1.385 Sensor*
- *Range – on request*
- *Battery powered thermometer*
- *4-digits LCD Display*
- *Stainless Steel Case, IP65 protection*

The thermometer type DPT3V2 supports standard Pt100 (Pt500, Pt1000) sensors and digitally displays the temperature in °C (or °F). The resolution is 0.1°C. 2- or 3-wire connection of RTD probe is provided. The special 3-wire connection assures full line compensation of connecting wire resistance and permits a longer distance between the sensor and the instrument. The thermometer is offered in two sizes – 100mm or 80mm. No separate power supply is required for the thermometer, as it takes power from 2 x 1.5V batteries - AA for the 100mm and AAA for the 80mm version.

The thermometer can be used in various applications and industries. It is specifically designed to be suitable for use in the food & beverage, chemical and pharmaceutical industries, and can be sealed after the initial configuration, if requested.

*We can provide it in a set with RTD probe – with custom construction and dimensions on request

Characteristics of type Battemp
- stainless steel case with 100 or 80 mm diameter, IP 65
- input – Pt100 (DIN IEC 751, a=1.385), 3-wire connection
- range -50°C to 200°C (or other on request)
- 4-digits LCD display, 12mm height, 4 sec update rate
- additive correction up to ±5 °C or ±9 °F, resolution 0.1
- ambient temperature – from -20°C up to 60°C
- accuracy – 0.25 % F.S.
- sensor cable length: up to 200 m
- power supply – 3V (2 x 1.5V, alkaline batteries, 1,5Ah).
- battery life – appr. 3 years. Low battery indication.

CONFIGURATION INSTRUCTIONS

To do any configurations or change batteries, you need to unscrew the lid of the protective housing, unscrew the two screws of the metal front panel and remove it, to reach the display PCB.

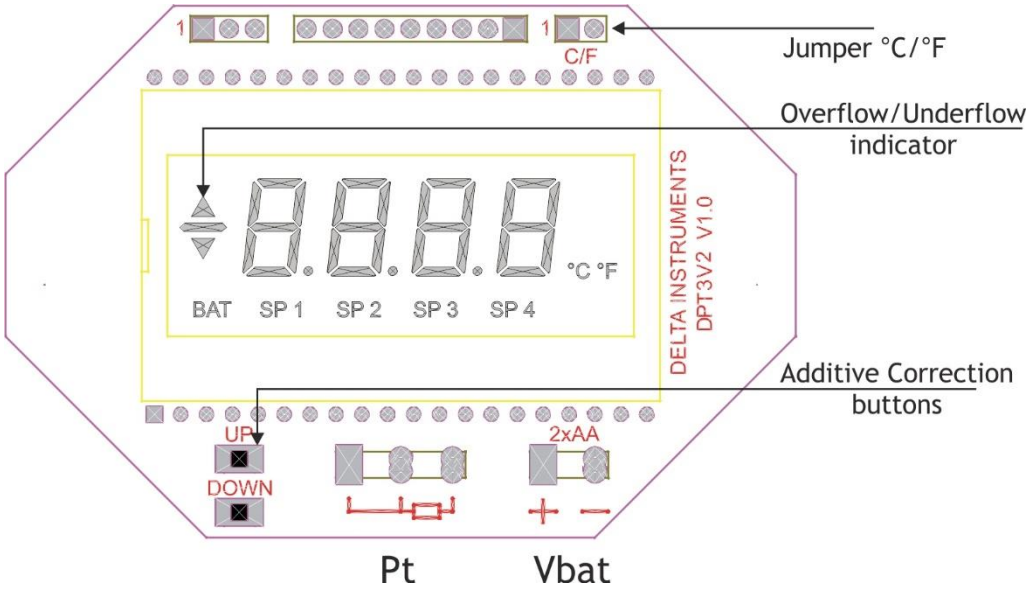
DPT3V2 supports additive correction (aka zero adjustment) up to ±5 °C or ±9 °F with resolution of 0.1. To adjust the measured temperature value, you can use the two buttons UP and DOWN shown on the diagram below. Pressing any of them initially enters the additive correction mode (indicated by symbols SP3) and displays the currently saved correction value. Any subsequent press of UP will increment and DOWN will decrement the correction. If you hold any button pressed, the correction will change more rapidly. If you don't press any button for 3 seconds, the new correction value will be saved and the device will enter standard measurement mode.

In standard measurement mode the symbols SP4 are blinking every few seconds as a heartbeat, indicating that the measured value is being updated.

In the case of low battery, the symbols BAT will be displayed.

To switch between °C and °F you can use the jumper C/F shown on the diagram below. Please note that switching the jumper will reset the saved additive correction.

CONNECTION DIAGRAM



CONNECTION AND MOUNTING OPTIONS

The device can be provided with various sensor connection and mounting options.

- Bo0 – radial (bottom) sensor connection without backside flange (e.g. for direct mounting)
- BoF – radial (bottom) sensor connection with backside flange (e.g. for wall mounting)
- Ba – backside central sensor connection (e.g. for direct mounting)

The **process connection options** to the sensor probe are also various: e.g. stainless steel sockets with threading 3/8" or 1/2" G (BSPP) or NPT or M16 x 1.5, cable plugs PG7 or PG9, or others. Please specify when making an enquiry or order.

We can also provide a variety of **temperature probes** to go as a set with the device (connection through cable or direct threaded or welded) in different constructions - sizes, shapes, process connections, cable types and lengths, etc. If you need us to provide such, please describe your structural requirements.