

USER MANUAL

DT-1/DT-3/DT16



WARRANTY CARD

It is necessary to present the following card
for warranty repairs.

SERIAL
NUMBER.....

TECHNICAL
INSPECTION.....

DATE OF
SALE.....

STAMP AND SIGNATURE

.....



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DT-1 and DT-3 thermometers are intended for measuring temperatures in the range of -100°C to 199.99°C. The devices are equipped with a measurement probe containing PT 1000 sensor. DT-16 thermometer is intended for measuring temperatures in the range of -20°C to 60°C. This device is also equipped with a PT 1000 sensor which is located at the outside part of casing in the plastic cover. Example usage: measuring the temperature in food industry, laboratories, refrigerators or cold rooms.

Available measurement probes for DT-1/DT-3 devices:

ST-10: blade length - 100 mm, cable length - 1 m, cable type - polyurethane, blade diameter 3 mm, maximum cable operating temperature up to 100°C.

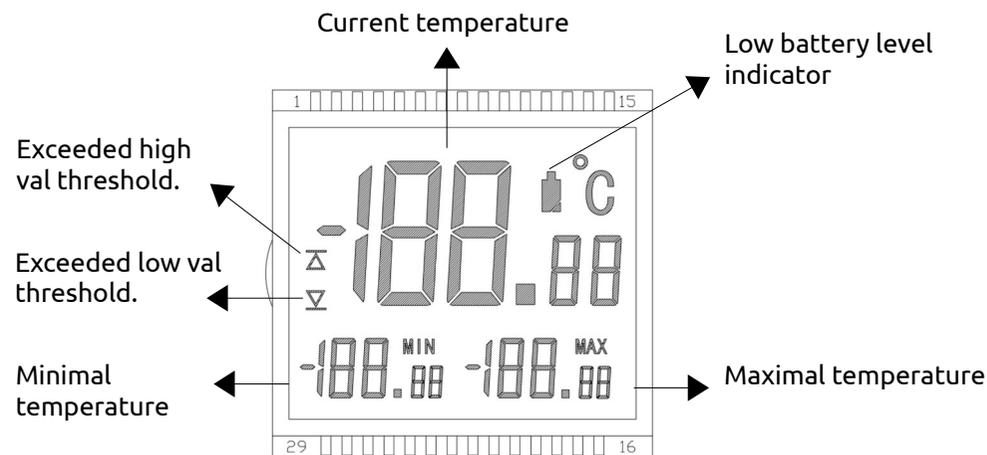
ST-11: blade length - 100 mm, cable length - 1 m, cable type - FEP, blade diameter 3 mm, maximum cable operating temperature up to 260°C.

ST-22: angled immersion probe, blade length - 90 mm, probe cable length - 1 m, cable type - polyurethane, blade diameter 3 mm, maximum cable operating temperature up to 100°C.

ST-05: blade length - 50 mm, probe cable length - 1 m, cable type - silicone, blade diameter 4 mm, maximum cable operating temperature up to 180°C.

Probe Type	Probe Temperature Range
ST-10	-100°C to 270°C
ST-11	-100°C to 270°C
ST-22	-100°C to 270°C
ST-05	-40°C to 180°C

Display



Turning on the device

To turn on/off the device, press the  button. When the device is turned on, the current, minimum, and maximum temperature will appear on the display.

HOLD Function

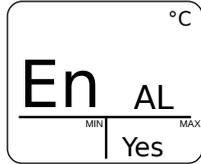
The HOLD function allows "freezing" the measured value and displaying it until the function is turned off. To activate/deactivate the function, press the  button.

Settings menu

The menu contains 6 settings options that control the alarms and contrast settings.

To enter the menu press and hold the  button for 3 seconds. To exit the menu, confirm each setting by pressing the  button, until the main screen appears.

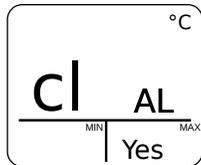
1. Enable/disable alarm



Button			
Function	Enable/disable alarm	Next menu option	Enable/disable alarm

Setting	YES	NO
	Alarm enabled	Alarm disabled

2. Delete active alarm

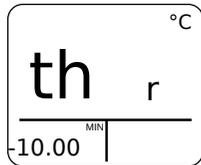


Button			
Function	Delete/leave alarm active	Next menu option	Delete/leave alarm active

Setting	YES	NO
	Delete alarm	Alarm remains as active

Temperature thresholds

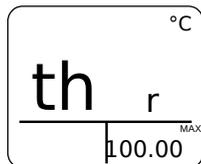
3. Set the minimum temperature threshold MIN



Button			
Function	Decrease MIN threshold value	Next menu option	Increase MIN threshold value

Setting	MIN
	The minimum threshold temperature, when exceeded, triggers the alarm and low value icon appears on the screen

4. Set the maximum temperature threshold MAX

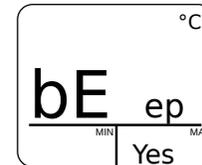


Button			
Function	Decrease MAX threshold value	Next menu option	Increase MAX threshold value

Setting	MAX
	The maximum threshold temperature, when exceeded, triggers the alarm and high value icon appears on the screen

Alarm indicators (appears only when alarm is enabled)

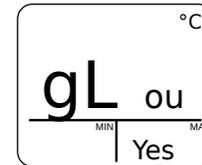
5. Enable sound indicator



Button			
Function	Enable/disable sound indicator	Next menu option	Enable/disable sound indicator

Setting	YES	NO
	In case of an alarm, an audible signal is turned on	In case of an alarm, an audible signal is turned off

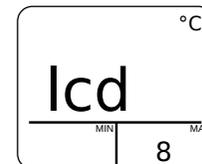
6. Enable light indicator



Button			
Function	Enable/disable light indicator	Next menu option	Enable/disable light indicator

Setting	YES	NO
	In case of an alarm, the display backlight "blink" is turned on	In case of an alarm, the display backlight "blink" is turned off

7. LCD contrast



Button			
Function	Decrease contrast level	Exit menu	Increase contrast level

Setting	LCD
	The display contrast level ranges from 1 to 15

Reset MIN/MAX values.

To reset the minimum/maximum temperature displayed on the main screen, turn off and turn on the device.

Screen Backlight

To turn on the display backlight, press the  button. The backlight will remain on for approximately 15 seconds.

Power Supply

The device is powered by a 3.7V, 800mAh Li-ion battery. Battery can be charged at least 500 times. Using the thermometer in temperatures higher or lower than its range can cause decreasing amount of charges or even damaging the battery.

Battery Symbol

Battery symbol is located in the upper right corner of the display.

If the battery level is **low** the battery symbol will appear on the screen.

If the battery level is **critical** the display will turn off and only the battery symbol will remain active.

In both cases the device needs to be charged.

When the device is being **charged** the battery symbol will be blinking.

Charging

To charge the device, connect it via the micro-USB cable to the charging port. The average charging time for the battery is 1.5 hour.

Device keeping

While the device is not used it is recommended to keep it in the temperature of 23 \pm 2°C.

Neodymium Magnet

A neodymium magnet located on the back of the case allows the device to be attached to metal surfaces.

Calibration

DT-1/DT-3 thermometers are calibrated using the reference thermometer DTI 1000, serial number 008954-01159, manufactured by Ametek Jofra Instruments, with a declaration of conformity to European Union standards.

We declare that the DT-1/DT-3 thermometer has been manufactured in accordance with the following standards:

Directive 2006/42/EC

Directive 2014/35/EU

Directive 2014/30/EU

PN-EN ISO 12100:2012

PN-EN ISO 13857:2010

PN-EN 349+A1:2010

EN60335-1:2012

EN60335-2-40:2004/A2:2009

PN-EN 55014-1:2017-06

PN-EN 13486:2004

SPECIFICATIONS

Parameter	DT-1	DT-3	DT16
Measurement Range	-100°C – 199.99°C	-100°C – 199.99°C	-20°C - 60°
Operating Temperature Range	-20°C - 60°C		
Measurement Resolution	0.01		
Accuracy	-50.00°C to -0°C -/+0.15°C 0.00°C to 100,00°C -/+0.05°C 100.01°C to 150.00°C -/+0.10°C 150.01°C to 199.99°C /+0,25°C		-20.00°C to 60°C -/+0.3°C
Measuring Frequency	2 measurements per second	15 seconds	
Battery Life	Approximately 480 hours	Approximately 8760 hours of continuous operation	Approximately 12000 hours of continuous operation
Power Supply	3.7V 800mAh Li-ion battery		
Charging Time	1.5 hours		
Case Dimensions	60x120x20 mm		
Display	LCD		
Case Protection Rating	IP66		

V3.2.3