

# *Termio 31 user manual*

*Precise thermocouple digital data logger*



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**Temperature logger TERMIO-31** is intended for temperature measurements in ranges -200°C to + 1400°C depending on external probe. It is equipped with a thermocouple mini socket and memory that allows it to save 32 thousand measurements. The logger may be used to monitor the temperature during the storage and transport of vaccines, medicine, and food, as well as production and warehousing, etc.

The logged measurements are saved in the device memory as .txt or .pdf files. The files may be downloaded onto the computer using the LogSoft application and the micro USB cable, which should be connected to both the computer and the device. It takes approximately 60 seconds to download 32 thousand records.

### **Temperature measurement**

The current temperature appears on the screen once it is turned on. To turn it on or off press the ON/OFF button.

### **WAIT and LOG icons**

Wait and log icons display the logging status. If the logging is paused, the display will show „WAIT“. If the logging is on, the display will show „LOG“.

### **Thresholds**

LogSoft application allows users to set minimal and maximal temperature thresholds. If the temperature exceeds the thresholds during the measurement the LED diode will start blinking and the screen will display the UP/DOWN arrow symbols accordingly.

### **Battery change**

When the battery is close to discharge, an „LOBAT“ icon will appear on the screen. Its recommended to change battery as fast as the icon pops up. To change the battery remove two screws located on the back and pry the battery cover off, then replace the battery.

### **Data logging**

The logging can be turned on/off in three ways: manually by holding the „MIN/MAX“ button for 3 seconds to turn it on and the „ON/OFF“ button also for 3 seconds to turn it off,

in the LogSoft app, using the „run/stop registration“ button, which can be found in the „registration“ section, automatically by selecting the specific time of logging in the LogSoft app, under the „registration“ section.

### **HOLD, MIN, and MAX functions.**

The HOLD function enables to freeze the measured value and keeps it on display until the function is turned off. To use it, press the MIN/MAX button.

The MIN and MAX functions enable to display the highest and lowest measured temperature values from the moment the device has been turned on.

To check the MIN value press the MIN/MAX button twice, and three times for the MAX value. It will be visible on the left side of the display.

### **Manufacturer's guarantee**

Termio-31 data logger is 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 Termio-31 data logger 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

## WARRANTY CARD

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

.....  
SERIAL NUMBER

.....  
TECHNICAL INSPECTION

.....  
DATE OF SALE

.....  
STAMP AND SIGNATURE

## Temperature probes

Device is equipped with mini socket which allows plugging in different types of probes which are equipped with mini plug. Termoprodukt company offers matching types of probes which are listed below. Use qr code to visit our site and learn more.

- ST-01K (-50°C to 250°C) probe length 120mm
- ST-16 (-30°C to 180°C) probe length 120mm
- ST-17 (-76°C to 260°C) probe length 135mm
- ST-20 (-100°C to 200°C) probe length 120mm
- ST-K (-200°C to 800°C) probe length 300mm

Parameter	Termio-31
Measurement Range	-200°C to 1400°C
Measurement Resolution	from -200° C to +1000° C: 0.1 ° C; 1° C outside
Accuracy	with ST-01 K probe: -/+0.6°C or better in range from 0°C to 200°C
Measuring Frequency	2 measurements per second
Battery Life	approximately 2000 hours
Power Supply	1x lithium battery 3.6V (1 / 2AA) included
Case Dimensions	45 mm × 100 mm × 19 mm
Display	LCD
Case Protection Rating	IP65