ZOGLAB

Safety and cautions

TM500 Portable Precision Temperature Meter is a precision instrument. Non professional maintenance personnel of ZOGLAB are not allowed to repair, modify, replace the battery and disassemble. ZOGALB will not assume any responsibility for any abnormal or damage to the instruments or indirect economic losses caused by human factors.

Please read this chapter carefully before you start to use DSR data logger.

Safe use of internal battery

The device uses 2 units 18650 rechargeable lithium battery, total capacity of 5200mAh, this type of lithium battery can be charged. Short circuit, close to the fire, and throw into the water are not allowed. Waste batteries should be properly handled or do environmental protection.

lithium ion ×2

The user shall not replace or disassemble the rechargeable battery without permission. Qualified, well-trained and knowledgeable personnel may open the instrument only. If the battery usage time becomes significantly shorter, please contact us for battery change.

Safe working environment

Working environment -10℃~50℃; 10%RH~95%RH(non-condensing). Please do not use this instrument outside the working temperature and humidity range. Do not use this instrument in an explosive or flammable gas, vapour or smoke environment.

Function view
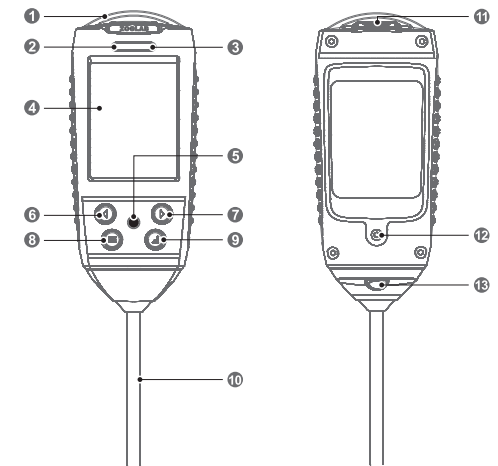
1. Hanging hole
2. Light sensor
3. Indicator
4. Display
5. ON/OFF button
6. Up/Plus button
7. Down/Minus button
8. Menu button
9. Confirmation button
10. Temperature sensor
11. USB interface
12. Rear cover screws
13. Light

TM500
Portable Precision Temperature Meter

Quick Reference Book

Power ON/OFF

Power on/off: Press and hold the red "ON/OFF button" ◉ in the middle; Screen on/off: press the "ON/OFF button" ◉ .
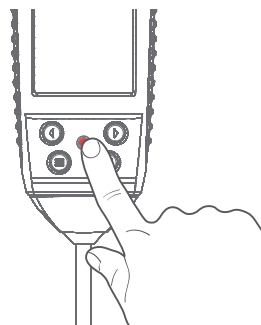
When the screen is on, the measurement and data recording functions(if started) remain in effect; the device will automatically stop recording when it is turned off.
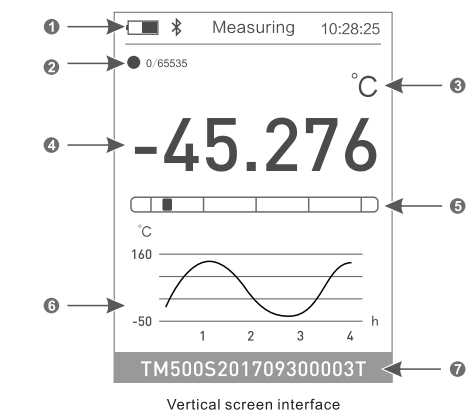
Temperature measurement

Insert the probe into the measured environment and read the temperature value after the temperature has stabilized.

Temperature sensing area

2cm
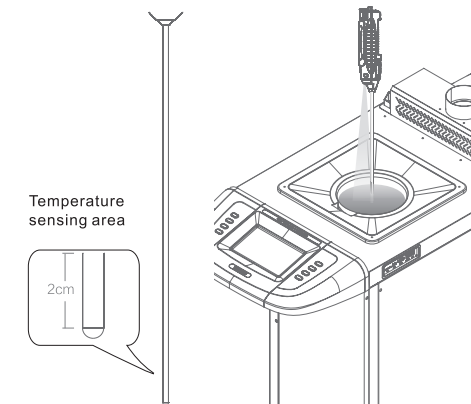
The length of the temperature sensing area is 2cm, and the immersion depth of the probe is recommended to be longer than 10cm.

Measuring interface

Vertical screen interface

1. Status line
2. Logging status/memory size
3. Temperature unit
4. Temperature measuring value
5. Temperature progress bar within the range
6. Multi-function area
7. Serial number
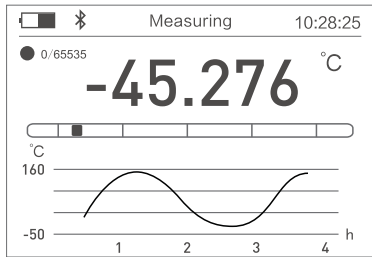
Horizontal screen interface

Setting interface

On the measuring interface, click the "menu button" ☰ , then it will switch to "setting interface" and "information interface" in turn.

| Setting 10:28:25	
Bluetooth	ON
Beep	OFF
Energy saving	OFF
Auto backlight	OFF
Screen rotation	OFF
Unit	℉
Resolution	0.01℉
Alarm	OFF
Up limit	+30.0℃
Low limit	−50.0℃
Logging interval	2s
Time	2018−03−05 10:28

Setting interface

Information 10:28:29

TM500

SN:TM500S201709300003T
HW:1.00   FW:1.00
BT MAC:50:33:8B:E5:C1:82
User ID:TM500S201709300003T
VBAT:3980 mV
IBAT:1487 mA
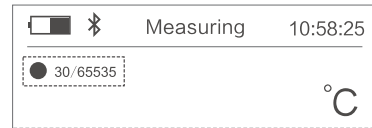Board:36.0℃

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Information interface

Data recording

On the measuring interface, long press "confirmation button" ⏎ to start/stop data recording, and the number of recorded points and the maximum capacity are shown at the upper left corner.
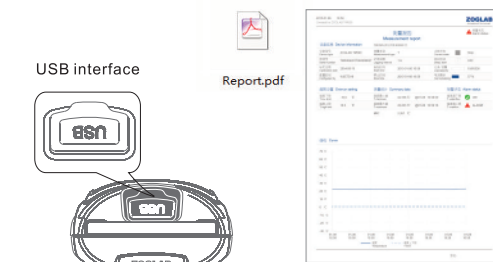
▯ * Measuring	10:28:25
◯ 0 / 65535	℃

Stop recording data

▯ * Measuring	10:58:25
● 30 / 65535	℃
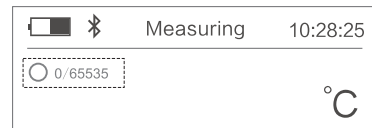
Start recording data

Recording export

When the device is turned on or has data records, a recording report in PDF format is automatically generated. USB drive-free reading is supported, users can connect to the PC via the USB port to check.
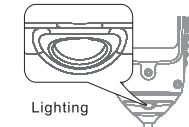
USB interface

Report.pdf

Recording reports

Lighting

When using the device to measure temperature, if it is in a dark measuring environment, long press the "menu key" ☰ to turn on the auxiliary lighting function. When the lighting function is turned on, the "lighting icon" appears in the status line.
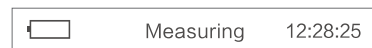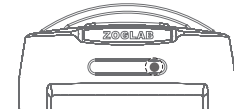
▯ * Setting 💡	10:38:25

Lighting function

Charging battery

If the power of the device is too low, the "battery symbol" on the screen will turn red and a low power indicator will appear. The indicator will turn red and keep flashing. When charging the device via USB port, the yellow indicator will turn light.
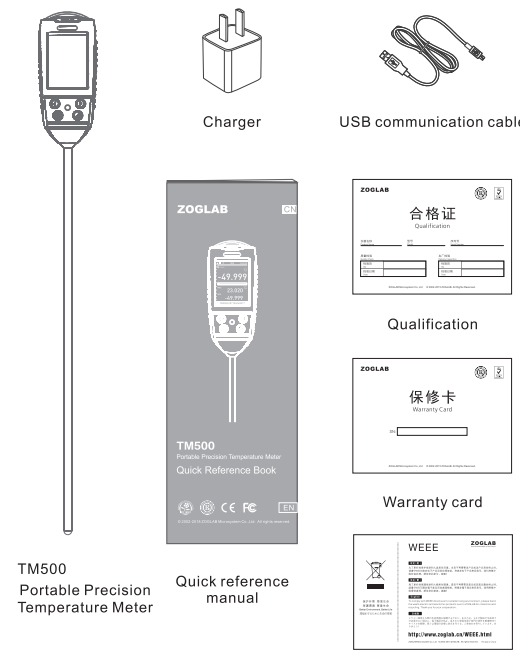
▯ Measuring	12:28:25

Low power status

Charging status

Technical specification

Measuring range	−50℃~160℃
Measuring accuracy	± 0.05℃
Resolution	0.001℃
Working environment	−10℃~50℃ , 10%~95%RH(No condensation)
Response time	14s / 21s
Sensor length	Φ6mm，400mm / 150mm
Memory size	65,535 units of recorded data with time markers
Battery	18650 × 2
Battery capacity	5200mAh
Battery life	60 hrs
Storage environment	−50℃~90℃, 10%~95%RH(No condensation)
Display	2.6 inch, IPS, 320 × 240
IP class	IP64
Communication interface	USB, Bluetooth, Wi−FI*
ESD protection	± 6KV
Housing	ABS PC, flame−retardant, toxicity and halogen free
Dimensions	140 × 59 × 36mm
Weight	230g
Certification	CE, FCC, VCCI, C−TICK

*Operational Features as requested

Packing details

Please confirm the following items included in the package:

Charger

USB communication cable

合格证
Qualification

保修卡
Warranty card

WEEE
WEEE card

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Portable Precision Temperature Meter

Quick reference manual

Probe size: 400mm, 150mm(optional)

FAQ

FAQ	Troubleshooting
Fail to turn on	The battery is dead or low power
Unable to charge	The battery is damaged or the main board is damaged
Abnormal reading	Sensor is damaged

It is suggested to calibrate annually.
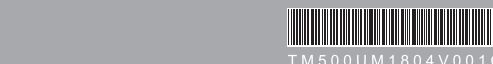
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Welcome to visit our website in order to get more information:
www. zoglab. cn

Lighting