

TM500 便携式基准温度计
快速使用手册

安全事项

TM500便携式基准温度计是一款精密仪器，非本公司专业维修人员请勿自行维修、改装、更换充电电池及拆卸机体。由于人为原因引起的仪器工作异常、损坏或间接造成的经济损失，本公司不予承担任何责任。

安装使用本仪器前，请仔细阅读本章关于安全使用事项的说明。

安全使用内部电池

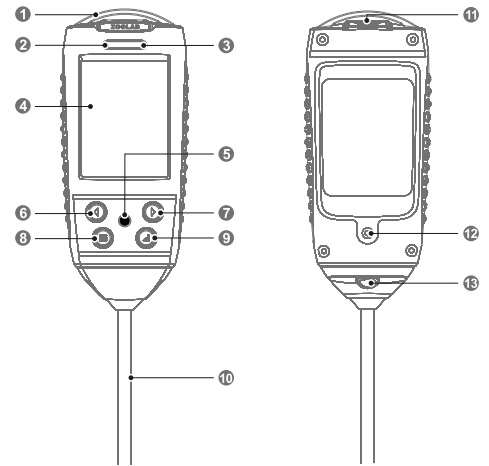
本仪器使用2节18650可充电锂电池，总容量达5200mAh，该型锂电池可充电，不能短路、靠近火源、投入水中，废弃电池应妥善处理或做环保处理。

用户不得擅自更换拆解充电电池，只能由合格的、经过维修培训且了解潜在危险的专业人员打开仪器外壳更换。若电池使用时间明显变短，请联系我们更换电池。

在安全工作范围内操作本机

工作环境-10℃~50℃；10%RH~95%RH(不结露)。请不要在此温湿度范围以外使用本仪器。不要在易爆炸、易燃性气体、蒸汽或烟雾的场所使用本仪器。

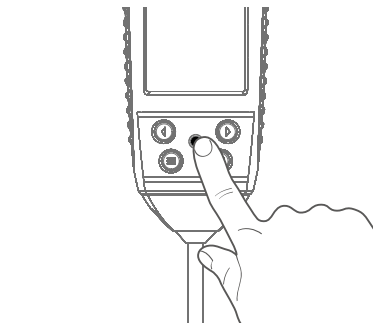
各部图示



- 1.挂孔
- 2.光线传感器
- 3.指示灯
- 4.显示屏
- 5.开/关机键
- 6.向上/加键
- 7.向下/减键
- 8.菜单键
- 9.确认键
- 10.温度探头
- 11.USB接口
- 12.电池盖螺丝
- 13.辅助照明灯

开机关机

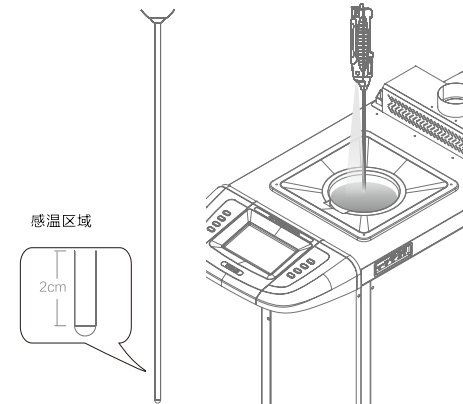
开/关机：长按中间红色的“开/关机键”；
息/亮屏：单击“开/关机键”。



☒ 息屏时，测量和数据记录功能(若开启)依然有效；
关机后设备将自动停止记录。

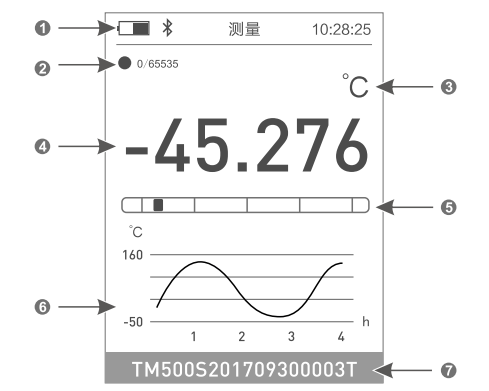
温度测量

将探头插入被测环境中，待温度稳定后读取温度测量值。

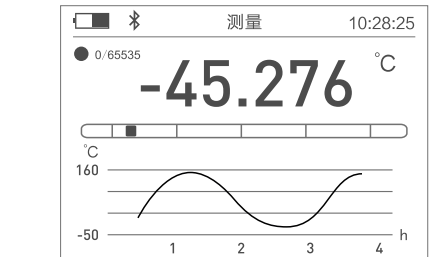


☒ 感温区域长度2cm，探头浸没深度建议大于10cm。

测量界面



- 竖屏界面
- 1.状态栏
 - 2.记录状态/容量
 - 3.温度单位
 - 4.温度测量值
 - 5.量程内温度模拟条
 - 6.功能区
 - 7.产品序列号



横屏界面

配置界面

在测量界面，单击“菜单键”，会依次切换到设置界面和信息界面。



设置界面



信息界面

数据记录

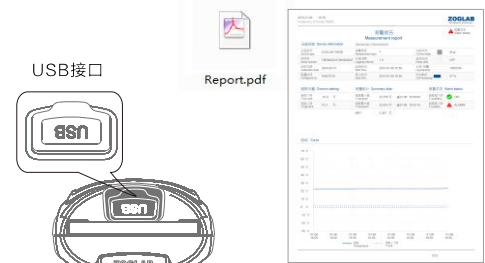
在测量界面，长按“确认键”可“启动/停止”记录数据，左上角同步显示记录点数及最大容量。



启动记录数据

记录导出

设备开启记录或有数据记录时，会自动生成PDF格式的记录报告。支持USB免驱读取，用户可通过USB口连接PC进行查看。



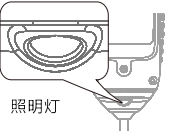
记录报告

辅助照明

在用设备测量温度时，若处于较暗的测量环境中，可长按“菜单键”开启辅助照明功能。当照明功能被开启后，界面的状态栏会出现“照明图标”。



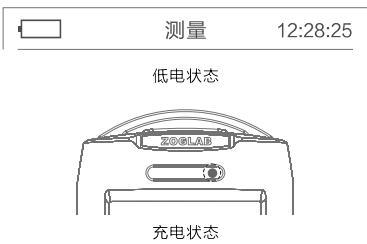
开启照明功能



照明灯

电池充电

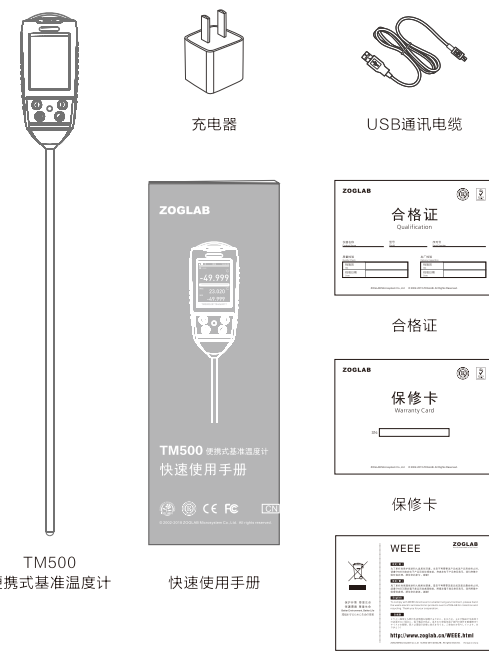
若设备电量过低，界面上“电池符号”变红，出现低电提示，指示灯变红不停闪烁。通过USB口给设备充电时，黄色指示灯长亮。



充电状态

装箱物品

请确认包装内应有下列物品：



WEEE贴士

☒ 探头尺寸：400mm，150mm 可选。

故障排除

常见问题	排除方法
不能开机	电池失效或电量过低
无法充电	电池损坏或主板损坏
温度显示异常	传感器损坏

! 建议每年校准一次。

中国免费咨询热线：
400-8878-571



请访问我们的网站以获得更多信息：
www.zoglab.cn

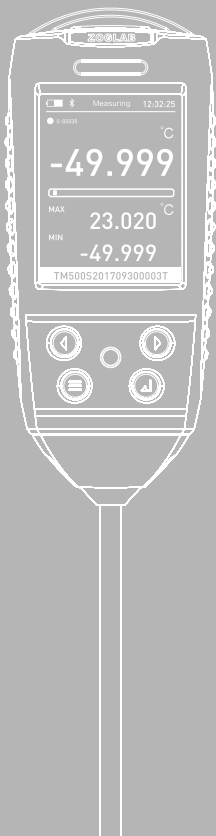
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TM500UM1804V001C

ZOGLAB
Atmosphere & Environment





TM500

Portable Precision Temperature Meter

Quick Reference Book



EN

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. ZOGLAB will not assume any responsibility for any abnormal or damage to the instruments or indirect economic losses caused by human factors.

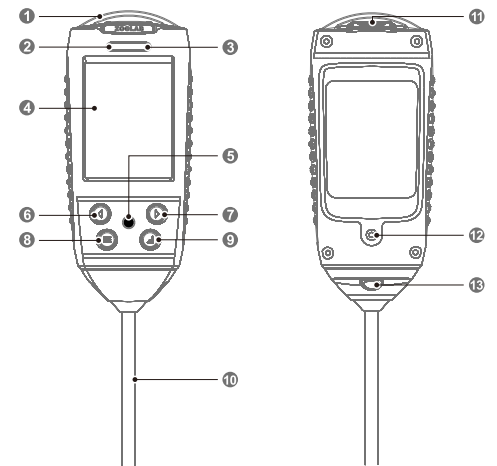
Before installing and using this instrument, please read the instructions on safe use in this chapter carefully.

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.

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°C~50°C; 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.

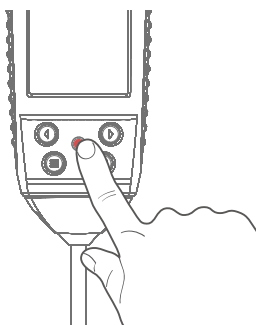
Function view



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

Power ON/OFF

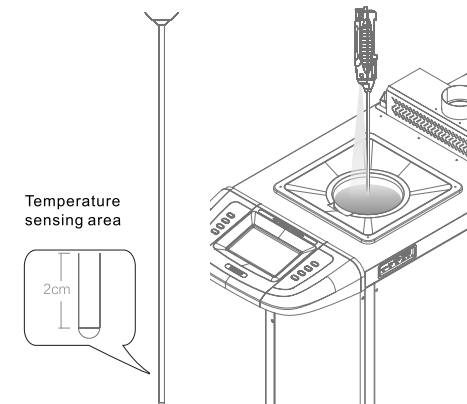
Power on/off: Press and hold the red "ON/OFF button" in the middle; Screen on/off: press the "ON/OFF button".



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.

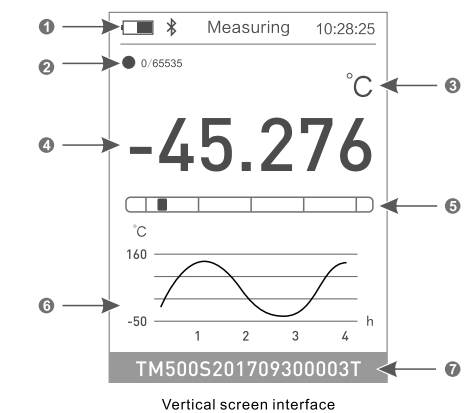
Temperature measurement

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

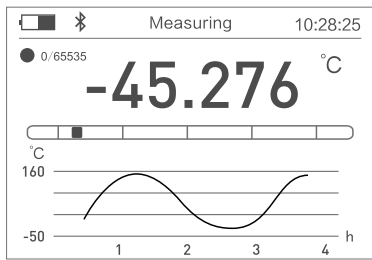


The length of the temperature sensing area is 2cm, and the immersion depth of the probe is recommended to be longer than 10cm.

Measuring interface



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	°F	
Resolution	0.01°F	
Alarm	OFF	
Up limit	+30.0°C	
Low limit	-50.0°C	
Logging interval	2s	
Time	2018-03-05 10:28	

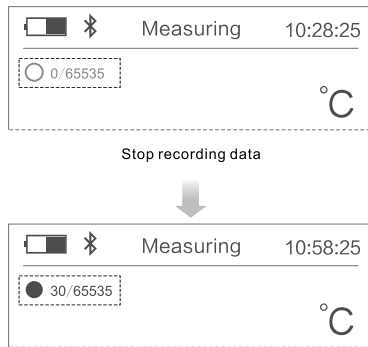
Setting interface

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°C		
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Information interface

Data recording

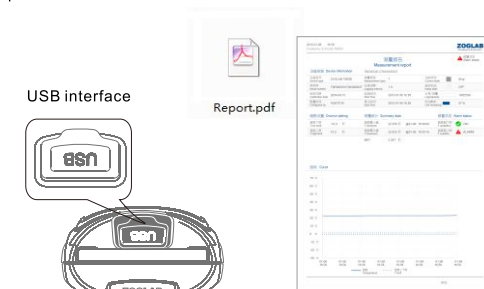
On the measuring interface, long press "confirmation button" to start/stop data recording, and the number of recorded points and the maximum capacity are shown at the upper left corner.



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.



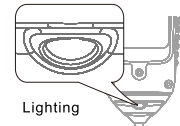
Recording reports

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.



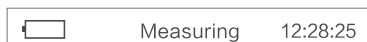
Lighting function



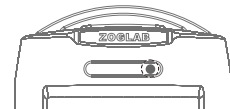
Lighting

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.



Low power status



Charging status

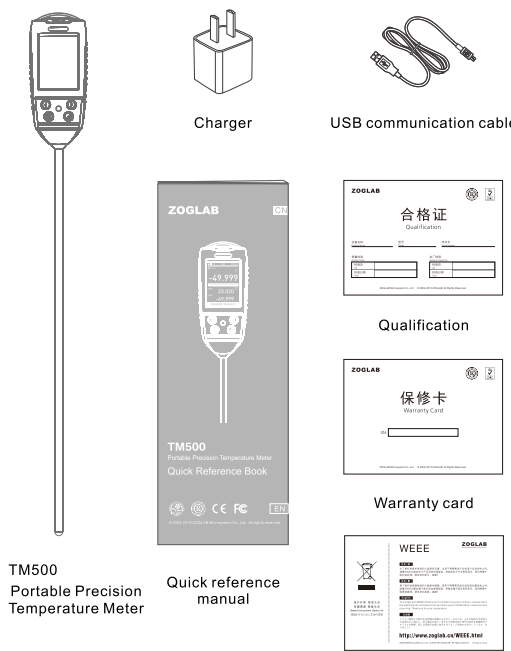
Technical specification

Measuring range	-50°C~160°C
Measuring accuracy	± 0.05°C
Resolution	0.001°C
Working environment	-10°C~50°C , 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°C~90°C, 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:



TM500
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.



ZOGLAB
Atmosphere & Environment

International Free Call
+86-400-8878-571



Welcome to visit our website in order to get more information:
www.zoglab.cn

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