

**ZOGLAB**

Measuring range -189°C ~ 960°C

Temperature resolution up to 0.1mK(0.0001°C)

Stability 0.5ppm/°C, 6ppm/year

Support double channels PT25 or PT100

Support communication via RS232/RS485, USB, LAN

Built-in battery can continuously work for 12 hours



**TM2000**

**PRECISION TEMPERATURE METER**



# TM2000



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## PRECISION TEMPERATURE METER

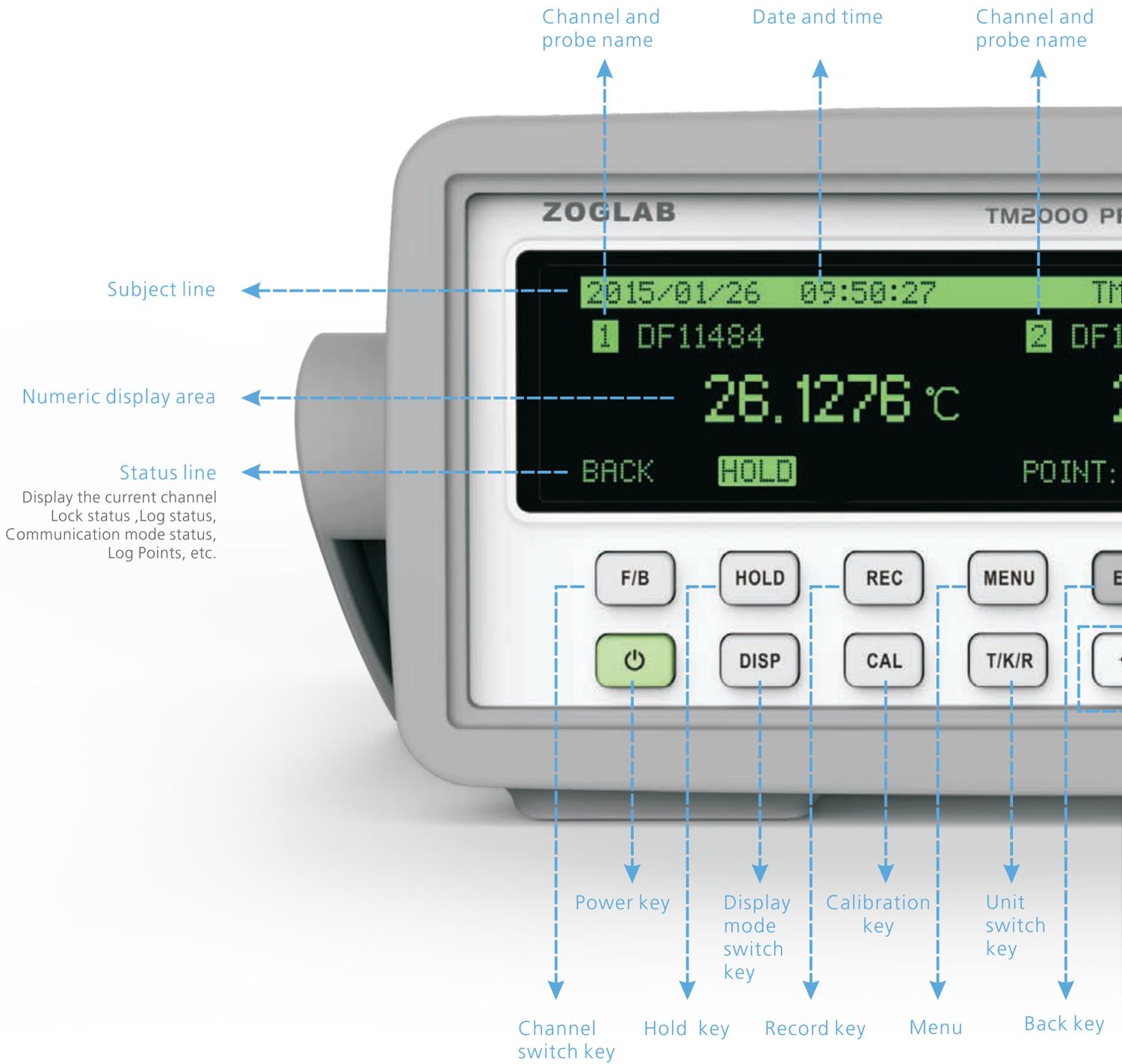
TM2000 is a high accuracy meter, and can connect first class standard platinum resistor, supporting two channels of PT25 or PT100, and the temperature resolution can reach to 0.1mK(0.0001°C).TM2000 is equipped with high-bright display, so clear reading could be effective under sunshine; Series port, Ethernet and USB communication interfaces are available; Built-in battery can unceasingly work for more than 12 hours, humanized design and convenient operation.

TM2000 has the function of memory recognition with 128 passive temperature sensors; two front and back channels standard PT25/PT100 sensor interfaces are switchable; built-in data logger could be exported to the external USB flash disk; PPB measuring circuit, with CE / FCC / VCCI / C-TICK, etc. Certified, ideal reference standard for liquid calibration notch and which could be used for dry block standard of extremely low uncertainty or independent measurement. Compared with the professional laboratory meters, TM2000 is a high cost-effective standard thermometer, improving working efficiency to the large extent.

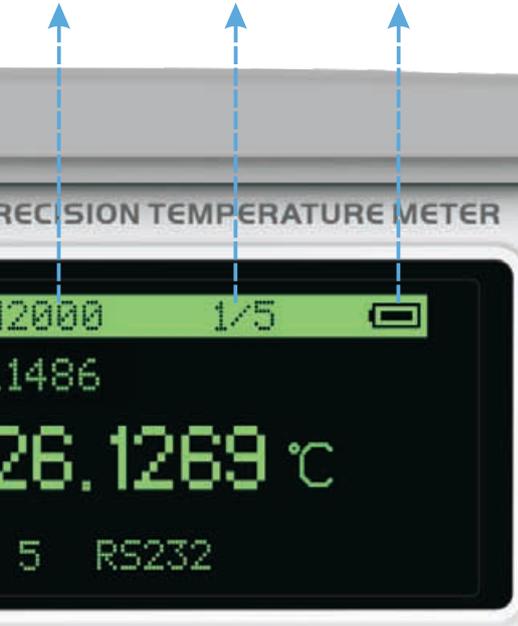
- Measuring range -189°C~960°C
- Temperature resolution up to 0.1mK(0.0001°C)
- Temperature stability 0.5ppm/ °C,6ppm/year
- Support double channels PT25 or PT100
- Support communication via RS232/RS485, USB, LAN
- Built-in battery can continuously work for 12 hours



# TM2000 • Host Machine



Model    Display mode number    Power state



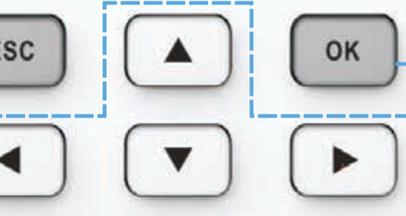
Front channel 1 port



Front channel 2 port



Front USB port  
External mobile storage  
for data backup, transport

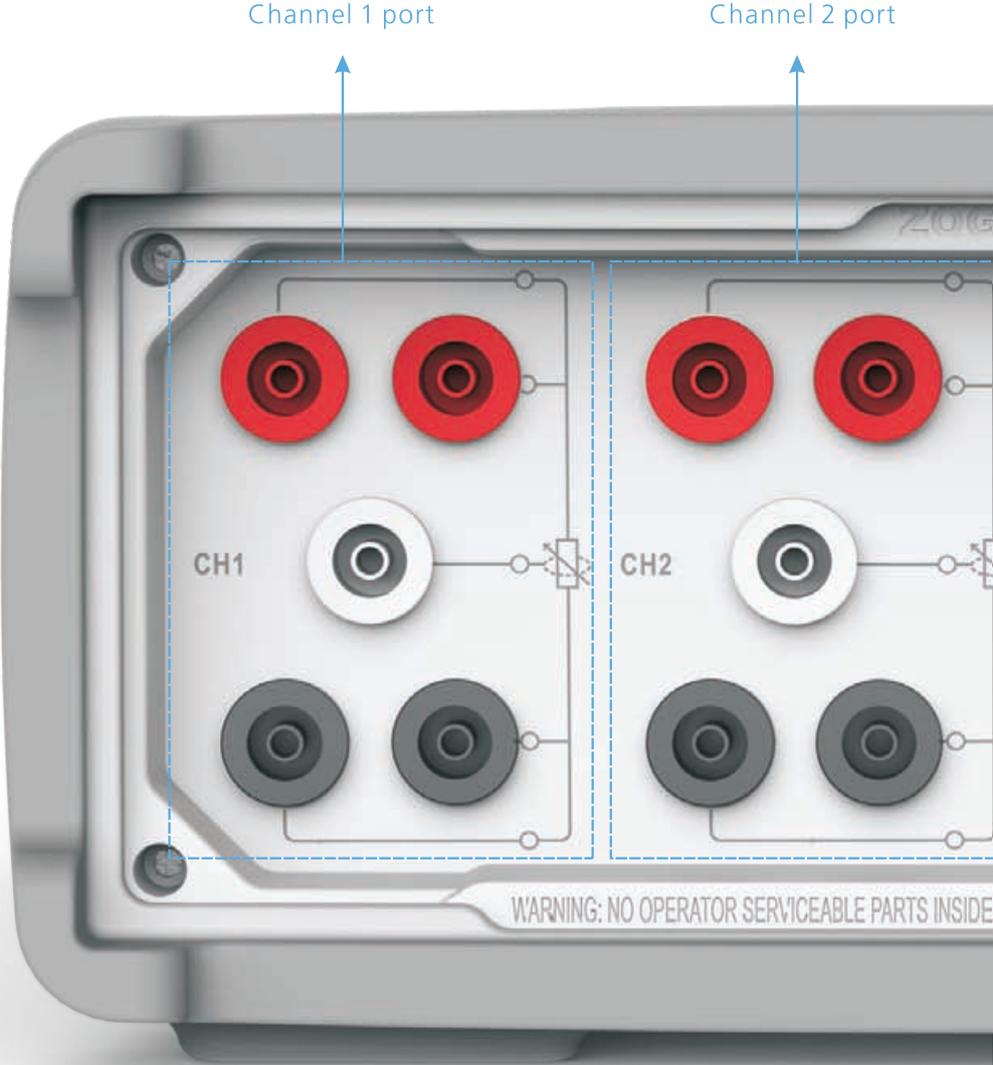


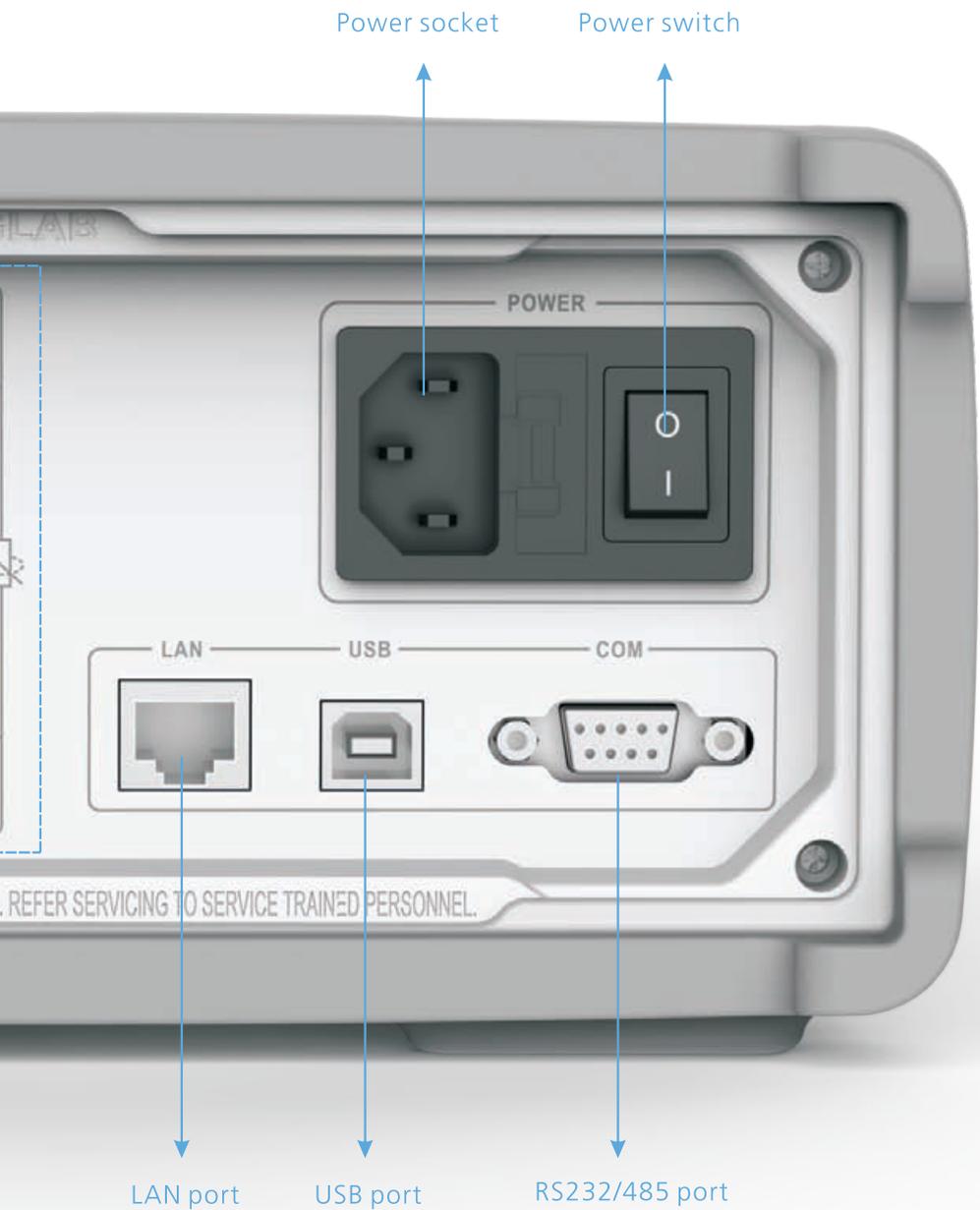
Direction key

OK key



TM2000 • Host Machine





# TM2000 • Functions and Features



## Measurement

- Measuring range -189°C~960°C
- Best temperature accuracy up to  $\pm 0.005^{\circ}\text{C}$
- Best temperature resolution up to  $0.0001^{\circ}\text{C}$



## Stability

- Temperature stability 0.5ppm/°C
- Long stability 6ppm/year



## Calibration

- Support fixed-point temperature calibration
- Support resistor measurement calibration
- Support out of calibration validity remind



## Display

- Highlight OLED display for indoor and outdoor use
- Support for multiple display modes
- Temperature measurement curve query



## Probe

- Support dual probes measurement
- Able to store parameters for 128 piece of ITS90 or IEC751 standard platinum resistor thermometer



## Logging

- Internal 8000 units of measuring data memory
- Support external USB flash disk to export data



## Communication

- Support RS232/RS485,USB,LAN communication interface
- Support remote control and network use
- Support embedded Web operation



## Power supply

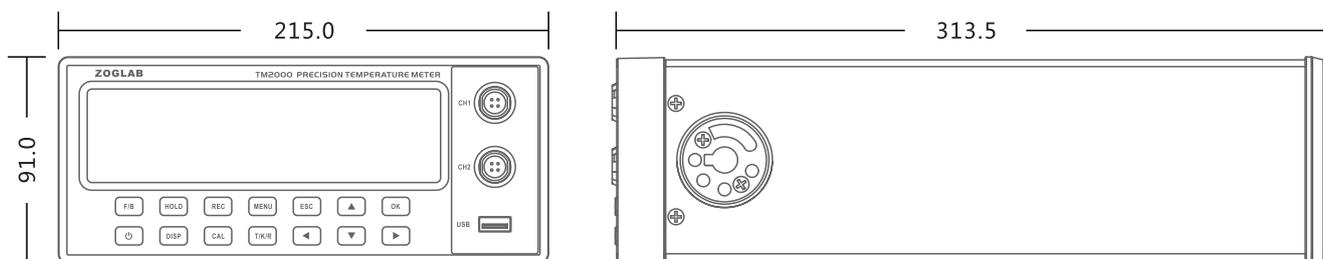
- 100~240VAC universal input
- Built-in lithium polymer battery support continuous work for 12 hours

## TM2000 • Technical Specification

### Technical Specification

T Measuring range	-189°C~960°C
T Accuracy	±0.005°C(Host machine), ±0.005°C(PT25 first class), ±0.01°C(PT25 second class)
T Resolution	0.001°C(could update to 0.0001°C)
Resistor measuring range	0Ω~400Ω
Resistor measuring accuracy	±0.0005Ω(0Ω~20Ω), ±25ppm(20Ω~400Ω)
Resistor resolution	0.0001Ω
Temperature stability	0.5ppm/°C
Long-term stability	6ppm/year
Measuring period	Two channels 2 seconds
Drive current	1.0mA/1.5mA
Display unit	°C, °F, K, Ω
Logging interval	1 second~24 hours
Maximum record data	Internal 8000 units, external USB Flash disk
Probe configuration data	Support configuration data for 128 probes
Front probe port	4-core wire special socket
Back probe port	Multifunctional socket
Measurement calibration	Fixed point calibration, linear calibration
Interface	RS232/485,USB,Ethernet(LAN),Web Service
Working environment	10~40°C, 10%~95%RH(No condensation)
Storage environment	-20°C~70°C, 10%~95%RH(No condensation)
AC power	100~240VAC 0.5A, 50~60Hz
Battery	7.4V 2600mAh, lithium polymer battery
Battery lifetime	12 hours(Continuous work)
EMC	EN 50081-1 Class B , EN 50082-1 Class B
ESD Protection	±25KV
Weight	1.2kg
Dimensions	215×91×313.5 mm
Certificate	CE, FCC, VCCI, C-CITK

#### Dimensions(mm)



# TM2000 • Accessories

## Standard Accessories

Serial communication cable



LAN communication cable



Power cable



USB communication cable



User's manual



Warranty card



WEEE card



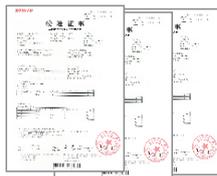
Qualification



Maintenance manual



Calibration Certificate



CD



## Optional Accessories

PT25  
first class



PT25  
second class



PT100



Anti-explosion transport case

## Ordering Information

Ordering model	Features
TM2000-PRO	First class quartz tube PT25 X2, accuracy $\pm 0.005\text{ }^{\circ}\text{C}$
TM2000-STD	Second class Armored PT25 X2, accuracy $\pm 0.01\text{ }^{\circ}\text{C}$
TM2000-LTD	PT100 AA X2, accuracy $\pm 0.05\text{ }^{\circ}\text{C}$
TM2000-ORG	Independent whole machine, no probe



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