

SMALL TYPE LOW TEMPERATURE COMPARATIVE CALIBRATION EQUIPMENT



MODEL KT-H503, KT-H504, KT-H504S



KT-H503



KT-H504
KT-H504S

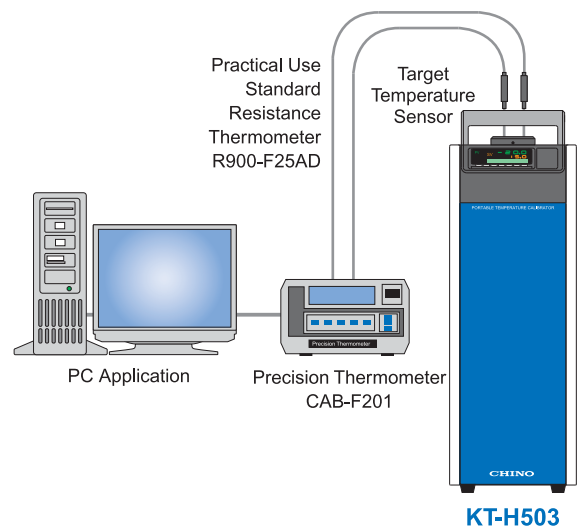
- Realize low temperature calibration from -100°C to 155°C
- Compact & light weight body
- For on-site calibration of resistance thermometers and thermocouples!



FEATURES

- **Calibration from -100 to 155°C**
KT-H503 calibrates from -100 to 50°C by using Stirling cooler, KT-H504 calibration from -30 to 155°C by using Peltier device and KT-H504S calibrates from -20 to 154°C for short length sensor.
- **Reduce the heating/cooling time**
KT-H503 (-100 to 50°C type) : 23°C to -100°C at about 40min.
KT-H504 (-30 to 155°C type) : -30°C to 155°C at about 20min.
KT-H504S (-20 to 155°C type) : -20°C to 155°C at about 20min.
- **Excellent temperature stability and temperature distribution**
KT-H503 (-100 to 50°C type) : $\pm 0.03^{\circ}\text{C}$ per 30min.
KT-H504 (-30 to 155°C type) : $\pm 0.01^{\circ}\text{C}$ per 30min.
Within 0.1°C (40mm from the bottom), within 0.01°C .
KT-H504S (-20 to 155°C type) : $\pm 0.02^{\circ}\text{C}$ per 30min.
Within 0.2°C (40mm from the bottom).
- **Simple temperature setting**
Select 8 preset temperature points by simple selecting button.
- **Calibration test report (option)**
CHINO calibration test report available.

EXAMPLE OF USE



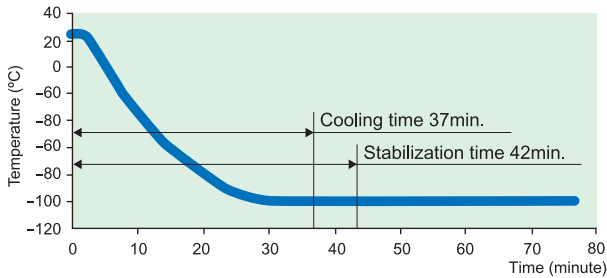
SPECIFICATIONS

Model	KT-H503	KT-H504	KT-H504S
Calibration Temperature Range	-100 to 50°C	-30 to 155°C* (Ambient temperature:23°C)	-20 to 155°C* (Ambient temperature:23°C)
Heating/Cooling Time	About 40min. (23 to -100°C) About 40min. (-100 to 50°C)	About 30min. (23 to -30°C) About 20min. (-30 to 155°C) About 15min. (155 to 23°C)	About 20min. (23 to -20°C) About 20min. (-20 to 155°C) About 20min. (155 to 23°C)
Stabilization Time	15min. (Stability time after reached to setting temperature.)	15min. (Stability time after reached to setting temperature.)	15min. (Stability time after reached to setting temperature.)
Stability	±0.03°C	±0.02°C	±0.02°C
Temperature Distribution	40mm from the bottom between wells	Within 0.1°C	Within 0.2°C
Temperature Control Method	Heating and cooling decoupling control, Z control		
Block	Replaceable: select from 8 block types, custom type available		
Temperature Sensor Length	Over 205mm	Over 195mm	Over 100mm
Display Resolution	0.1°C/0.01°C		
Communication Interface	RS232C		
Power Supply	100 to 240V AC 50/60Hz	100 to 120/200 to 240V AC Select 50/60Hz	
Maximum Power Consumption	150VA (at 100V AC) 270VA (at 240V AC)	350VA (at 100V AC) 450VA (at 240V AC)	
Weight	About 12kg	About 7.0kg	

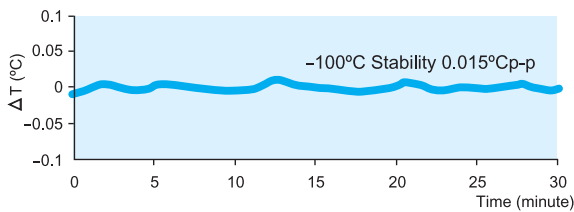
*If the ambient temperature is higher than 23°C then there is a risk that the min. temperature will also rise up.

MEASURED DATA (KT-H503)

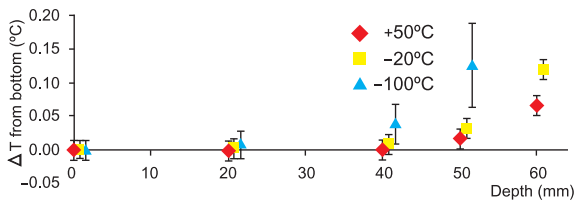
Cooling time and stabilization time



Stabilization at -100°C

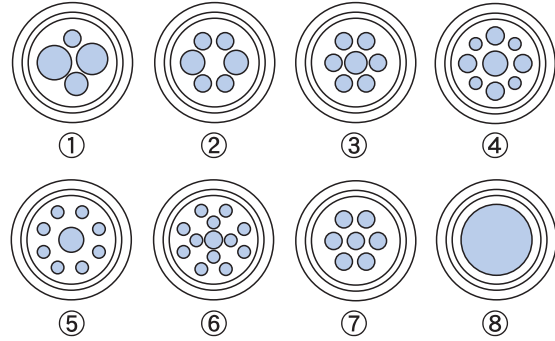


Temperature Distribution (vertical direction)



BLOCK TYPES

Block can be changed depending on the temperature sensor to be calibrate.
Custom type is available.

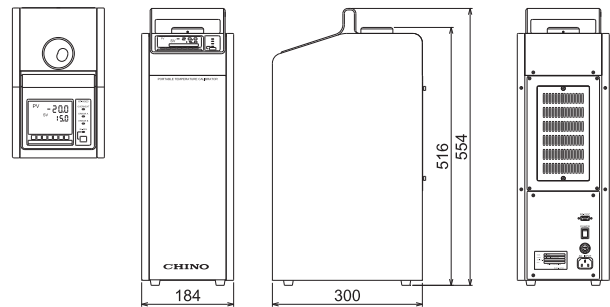


MEASURING WELL DETAILS FOR BLOCK

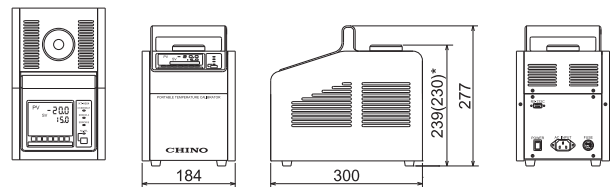
No.	Symbol			Outside diameter of standard sensor	Measuring well and numbers
	KT-H503	KT-H504	KT-H504S		
①	KT-H5TB-01	KT-H5TB-21	KT-H5TB-31	φ7.2mm	φ7.6mmx1, φ6.6mmx1 φ5.0mmx1, φ3.4mmx1
②	KT-H5TB-02	KT-H5TB-22	KT-H5TB-32	φ3.2/φ4.8mm	φ5.0mmx2, φ3.4mmx4
③	KT-H5TB-03	KT-H5TB-23	KT-H5TB-33	φ4.8mm	φ5.0mmx1, φ3.4mmx6
④	KT-H5TB-04	KT-H5TB-24	KT-H5TB-34	φ4.8mm	φ5.0mmx1, φ3.4mmx4, φ2.0mmx4
⑤	KT-H5TB-05	KT-H5TB-25	KT-H5TB-35	φ4.8mm	φ5.0mmx1, φ2.0mmx8
⑥	KT-H5TB-06	KT-H5TB-26	KT-H5TB-36	φ3.2mm	φ3.4mmx1, φ2.0mmx12
⑦	KT-H5TB-07	KT-H5TB-27	KT-H5TB-37	φ3.2mm	φ3.4mmx7
⑧	KT-H5TB-08	KT-H5TB-28	KT-H5TB-38	—	φ17mmx1

DIMENSIONS

KT-H503



KT-H504/504S



*230 for KT-H504S

Unit: mm

Specifications subject to change without notice. Printed in Japan (I) 2017. 4

CHINO CORPORATION

32-8 KUMANO-CHO, ITABASHI-KU, TOKYO 173-8632
 Telephone : +81-3-3956-2171
 Facsimile : +81-3-3956-0915
 E-mail : inter@chino.co.jp
 Website : www.chino.co.jp/