

Dry Block Temperature Calibrator

XINYI382 Series



Empowering Precision Measurement

Dry Block Temperature Calibrator

- Compact and lightweight, easy to carry
- Various insert blocks available, customization on request
- Excellent axial and radial temperature uniformity
- Deep sensor immersion for improved calibration accuracy
- 5.0" capacitive touch display, full touch operation
- Chinese / English user interface
- Fast cooling and stable temperature control
- Replaceable heating block
- Integrated protection functions for load and sensor safety



OVERVIEW

XINYI382 Series Dry Block Temperature Calibrators

are compact, portable, and easy to use, enabling fast and reliable temperature calibration across a wide range of industries.

By adopting an advanced international heating design, the XINYI382 Series delivers fast heating, rapid stabilization, and quick cooling, significantly reducing calibration time compared with conventional on-site dry block calibrators.

High-precision temperature control electronics and sensors ensure accuracy exceeding that of typical domestic products and meeting international standards.

The innovative full touch-screen interface further enhances ease of operation and user efficiency.

Technical Data

type	Negative temperature type			Medium temperature type	High temperature type
model	XINYI382-150 A	XINYI382-150B	XINYI382-150C	XINYI382-650	XINYI382-1200
temperature range	-20 °C~150 °C	-30 °C~150 °C	-40 °C~150 °C	35/50 °C~650 °C	300 °C~1200 °C
heating rate	+30 °C → +100 °C: approx. 20 min +30 °C → +150 °C: approx. 40 min	+30 °C → +100 °C: approx. 20 min +30 °C → +150 °C: approx. 40 min	+30 °C → +100 °C: approx. 20 min +30 °C → +150 °C: approx. 40 min	+30 °C → +300 °C: approx. 7 min +30 °C → +400 °C: approx. 12 min +30 °C → +650 °C: approx. 25 min	+30 °C → +1200 °C: approx. 75 min
cooling time	+25 °C → 0 °C: approx. 25 min 0 °C → -20 °C: approx. 15 min	From +25 °C to 0 °C: approx. 15 min From 0 °C to -20 °C: approx. 15 min From -20 °C to -30 °C: approx. 22 min	+25 °C → 0 °C: approx. 15 min 0 °C → -20 °C: approx. 15 min -20 °C → -30 °C: approx. 22 min -20 °C → -40 °C: approx. 20-40 min	+650 °C to +50 °C: approx. 235 min	+1200 °C → +800 °C: approx. 25 min +800 °C → +600 °C: approx. 15 min +600 °C → +300 °C: approx. 60 min +300 °C → +50 °C: approx. 180 min

Display accuracy	≤±0.1℃	≤±0.1℃	≤±0.1℃	Below 400℃: ≤±0.35℃ 400-650℃: ≤±0.5℃	≤±1.2℃
Insertion depth	160mm			150mm	135mm
Average heat block diameter	36mm	32mm	32mm	32mm	39mm
Temperature field stability	≤±0.02℃	≤±0.02℃	≤±0.02℃	≤±0.05℃	≤±0.2℃
Horizontal temperature field	≤±0.05℃	≤±0.05℃	≤±0.05℃	≤±0.05℃	≤±0.25℃
Vertical temperature field	The deviation in the range of 50mm calculated from the bottom of the hole of the soaking block is 1 degree				
Temperature unit	℃ or °F				
Temp Accuracy	0.10%				
Display resolution	0.01℃				
maximum power	Negative temperature type: 3000W, medium temperature type: 1200W, high temperature type: 3000W				
weight(Net weight)	Negative temperature type: 13kg, medium temperature type: 11kg, high temperature type: 11kg				
weight (Containing packaging)	Negative temperature type: 23kg, medium temperature type: 18kg, high temperature type: 20kg Packaging includes aluminium box and transport wooden box				
Outline size	Negative temperature type and high temperature type: 310*190*340mm, medium temperature type: 250*150*310mm				
Use environment	Ambient temperature 0-50℃, relative humidity less than 95% (no condensation)				
Power supply	220VAC ± 10%, 45 ~ 60Hz				
Selection function	Verification Data Recording and Exporting, up to 250 sensors, 2500 records, USB Device Communication Interface				

Other temperature ranges are available upon request and must be specified at the time of ordering.

Negative temperature type (-20 °C to 150 °C):

With 4 insert bores: Ø6 / Ø8 / Ø10 / Ø12 mm.

Negative temperature type (-30 °C to 150 °C):

With 4 insert bores: Ø6 / Ø8 / Ø8 / Ø10 mm.

Negative temperature type (-40 °C to 150 °C):

With 4 insert bores: Ø6 / Ø8 / Ø8 / Ø10 mm.

Medium temperature type:

Two configurations available (to be selected at the time of ordering):

3 insert bores: Ø8 / Ø10 / Ø12 mm

4 insert bores: Ø6 / Ø6 / Ø8 / Ø8 mm

High temperature type (300 °C to 1200 °C):

With 4 insert bores: Ø6 / Ø8 / Ø10 / Ø12 mm.

Special insert bore diameters are available upon request and must be specified at the time of ordering.