

# ice point™ Calibration Reference Chamber

## High Precision Thermoelectric Chamber Uses Water to Maintain 0°C (32°F) Continuously

TRCIII-A



- ✓ Stylish Design
- ✓ Portable Rugged Case for Use in the Factory, Calibration Laboratory, or Instrument Shop
- ✓ Built-in Temperature Readout with 0.1 (°F/°C) Resolution
- ✓ Accepts up to 6 Probes at One Time
- ✓ Calibration of All Probe Type Thermometers and Sensors



TRCIII-A shown smaller than actual size.

Probes sold separately; please next page.

The ice point™ TRCIII-A Calibration Reference Chamber is part of fine line of calibration reference instrumentation.

The TRCIII-A ice point™ Reference Chamber relies on the equilibrium of ice and distilled, deionized water at atmospheric pressure to maintain 6 reference wells at precisely 0°C (32°F). Each well extends into a sealed cylindrical chamber containing the distilled deionized water. The outer walls of the chamber are cooled by thermoelectric cooling elements. The increase in volume produced by the creation of ice crystals within the cell is sensed by the expansion of a bellows, which operates a microswitch and controls the cooling elements. The alternate freezing and thawing of the ice accurately maintains a 0°C (32°F) environment around the reference wells.

### Features

- ✓ 230 Vac CE Marked Models
- ✓ NIST Calibration Certificate Included
- ✓ Bench-Top Design with Tilt Handle Standard
- ✓ Illuminated Power Switch
- ✓ Companion hot point® Dry Block Probe Calibrator Available (Model CL900A/950A)

## Specifications

**Reference Wells:** 6 wells, 4.0 mm (5/32" ID, 95.25 mm (3 3/4") deep; wells are thermally and electrically grounded to each other; accepts 3 mm (1/8") OD probes

**Reference Temperature:** 0°C (32°F)

**Accuracy:** ±0.1°C (±0.18)

**Stability:** ±0.03°C (±0.07) for constant ambient

**Environmental Ambient:**

2 to 32°C (35 to 90°F)

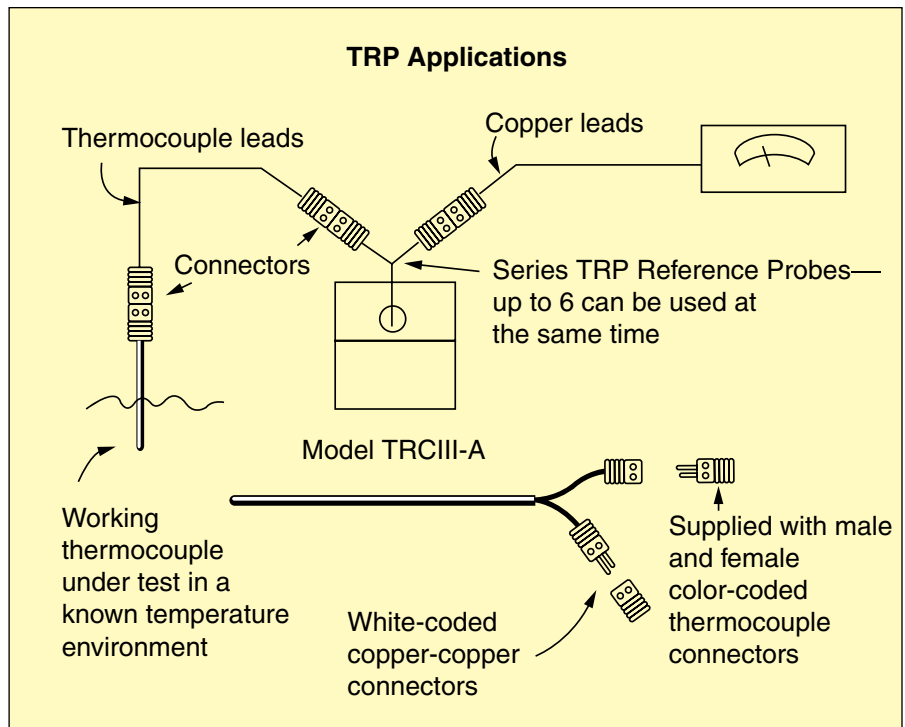
**Power:** 115/230 Vac, 50 Hz, 104 W

**Stabilization Time:** 2 hours after initial power up

**Dimensions:**

203 H x 419 W x 305 mm D  
(8 x 16 1/2 x 12")

**Weight:** 11.8 kg (26 lb)



**To Order Visit [newportUS.com/trciii-a](http://newportUS.com/trciii-a) for Pricing and Details**

Model No.	Description
TRCIII-A	ice point™ reference, 120 Vac operation
TRCIII-A-230VAC*	ice point™ reference, 230 Vac operation

Comes complete with operator's manual and NIST calibration certificate.

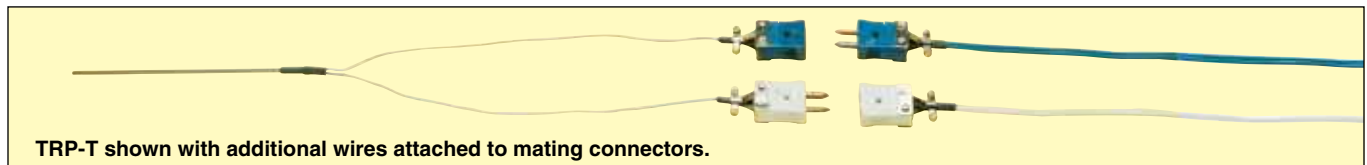
\* **Note:** Only 230 Vac model is available as CE marked.

**Ordering Examples:** TRCIII-A, ice point™ reference cell, TRP-K, TRP-J, TRP-T, TRP-E, Type K, J, T and E temperature reference probes.

**Caution:**  
Unit must not be allowed to freeze or damage will result.

We make running changes when technical advances allow. Check at time of ordering for additional features.

## TRCIII-A Accessories



### Thermocouple TRP Features

- ✓ Made with Special Limits of Error Material
- ✓ All Standard Calibrations Available
- ✓ Comes Complete with Mating Connectors
- ✓ Can Be Ordered with 12, 24 or 36" Leads

### Thermocouple TRP Probes

Model No.	Thermocouple Material Type	
	+	-
TRP-K	CHROMEGLA®	ALOMEGA®
TRP-T	Copper	Constantan
TRP-E	CHROMEGLA®	Constantan
TRP-J	Iron	Constantan
TRP-S	Platinum	Platinum 10% Rh
TRP-R	Platinum	Platinum 13% Rh
TRP-B	Platinum 30% Rh	Platinum 6% Rh
TRP-C	W 5% Re	W 26% Re
TRP-D	W 3% Re	W 25% Re

\* Refrigeration required for below ambient cooling.

\*\* Available as an option where not supplied as standard as HCTB-COIL.

†† For 240 Vac power, add suffix "-240V" to model number, no additional charge.

**Note:** For 4-point NIST calibration, points: -20°C, 60°C, 120°C, 180°C, add suffix "-NIST" to model number for additional cost.