



UCal 400+

UCal 400+ Portable Dri-Block Calibrator

Calibrate your temperature sensors and systems with our economically priced portable unit!

Key Features

- Wide temperature range
- Built in program for thermal switch testing
- Maximum temperature of 430°C/806°F
- Fast heat up and cool down
- 10 insert formats available
- Independent over-temperature protection
- Only 4Kg with included multi-well insert and NIST cert

The UCAL400+ Calibrator provides a safe, dry and constant temperature source, and can be used either on a bench top or as a portable field unit. The unit covers the temperature range from 5°C above ambient up to 430°C using a machined aluminum insert block as the heat transfer medium. The temperature control circuit is built into the unit. Even though the unit heats up rapidly, highly efficient insulation ensures that the case remains cool enough to handle even at maximum operating temperatures. This calibrator has been designed to comply with all relevant Radio Frequency interference and electrical safety regulations.

Technical Specification

Temperature Range	5°C/9°F above ambient to 430°C/806°F
Cooling Rate	400°C to 100°C - 21 min
Heating Rate	20°C to 400°C - 12 min
Over-Temp Cutout	Approx. 450°C
Specification at:	Stability after 15 minutes
200°C	+/- 0.03°C (Accuracy +/-0.3°C)
400 °C	+/- 0.05°C (Accuracy +/-0.5°C)
Well to well Uniformity	0.015°C @ 200°C/ 0.025°C @ 400°C
Display Resolution	0.1°
Fan Cooling	Automatic
Weight	4kg
Insert Immersion	114.3mm
Dimensions (W x D x H)	20.3 x 20.3 x 22.2 cm
Power	120 or 240V, 900W

¹ The UCAL400+ includes one multi-well insert FINSALB (Ø10, 8, 6, 4.5, 3mm well sizes), power cable, insert extractor, NIST traceable calibration certificate and instruction manual.

Options

- Inserts from standard list type FINSAL-
- Cooling probe for rapid cooling of block
- Carry case soft
- UKAS calibration certificate

Ordering Information

Product Code	Model	Net Weight (kg)
FDBU400D	UCAL400+, 230V, 50/60Hz, 900W	4.0
FDBU400P	UCAL400+, 120V, 50/60Hz, 900W	4.0

The Cooling Probe can be used to rapidly cool the insert – chilled water passes through the probe that fits inserts with 10mm ø hole or larger.

Accessories

Product Code	Model	Net Weight (kg)
FDB00CP	Cooling Probe for 425,650,700X, UCAL400+	0.4kg
7032718	Soft Carry case for Ucal400+	2.3kg

tecal portable dri-block® calibrators



Ordering Information

Tecal 140F / 140S / 140H / 425F / 425S / 425H / UCAL400+ Inserts (Immersion Depth 114.3mm)

Product Code	Description	Net weight kg
FINSALA	Insert 5 x 6mm probes aluminium	0.5
FINSALB	Insert 10 + 8 + 6 + 4.5 + 3mm probes aluminium	0.5
FINSALC	Insert 2 x 6mm + 2 x 10mm probes aluminium	0.5
FINSALD	Insert 2 x 6mm + 2 x 12mm probes aluminium	0.5
FINSALE	Insert 1 x 6mm probe aluminium	0.5
FINSALF	Insert 5 x 1/4" probes aluminium	0.5
FINSALG	Insert 3/8" + 5/16" + 1/4" + 3/16" + 1/8" probe aluminium	0.5
FINSALH	Insert 2 x 3/8" + 2 x 1/4" probes aluminium	0.5
FINSALI	Insert 2 x 1/2" + 2 x 1/4" probes aluminium	0.5
FINSALJ	Insert 1 x 1/4" probe aluminium	0.5
FINSALK	Insert blank aluminium	0.5
FINSALL	Insert 9/16" probe aluminium	0.5
FINSALM	Insert 5/8" probe aluminium	0.5
FINSALN	Insert 11/16" probe aluminium	0.5
FINSALO	Insert 3/4" probe aluminium	0.5
FINSALP	Insert 11 + 9 + 5 + 4 mm probes aluminium	0.5
FINSALQ	Insert 6mm probe aluminium (immersion depth 40mm)	0.5
FINSALR	Insert 6mm + 9mm probes aluminium	0.5
FINSALT	Insert 9 x 3.18mm probes aluminium	0.5
FINSALX	Aluminium insert 6 x 4mm probes	0.5
FINSALZ	Insert 20mm probe aluminium	0.5
FINSALAB	Aluminium insert 8 x 3.18mm + 1 x 6mm probes	0.5
FINSALAC	Aluminium insert 6.6mm + 19.5mm probes	0.5
FINSALAD	Aluminium insert 2x8mm / 6mm / 9mm probes	0.5
FINSALAF	Aluminium insert 6x3mm probes	0.5
FINSALAH	Aluminium insert 16mm probes	0.5
FINSALAL	Aluminium insert 2x6mm + 3x3.5mm probes	0.5
FINSALAM	Aluminium insert 4x10mm probes	0.5
FINSALAV	Aluminium insert 2x6mm + 1x12mm + 1x 15mm probes	0.5
FINSALAW	Aluminium insert 2x10mm + 2x7mm probes	0.5
FINSALAY	Aluminium insert 1x6mm + 8x1.5mm probes	0.5

Tecal 650F / 650S / 650H / 700X Inserts

(Immersion Depth 152mm)

Product Code	Description	Net weight kg
FINSABA	Insert 5 x 6mm probes aluminium bronze	1.1
FINSABB	Insert 10 + 8 + 6 + 4.5 + 3mm probes aluminium bronze	1.1
FINSABC	Insert 2 x 6mm + 2 x 10mm probes aluminium bronze	1.1
FINSABD	Insert 2 x 6mm + 2 x 12mm probes aluminium bronze	1.1
FINSABE	Insert 1 x 6mm probe aluminium bronze	1.1
FINSABF	Insert 5 x 1/4" probes aluminium bronze	1.1
FINSABG	Insert 3/8" + 5/16" + 1/4" + 3/16" + 1/8" probes aluminium bronze	1.1
FINSABH	Insert 2 x 3/8" + 2 x 1/4" probes aluminium bronze	1.1
FINSABI	Insert 2 x 1/2" + 2 x 1/4" probes aluminium bronze	1.1
FINSABJ	Insert 1 x 1/4" probe aluminium bronze	1.1
FINSABK	Insert blank aluminium bronze	1.5
FINSABL	Insert 9/16" probe aluminium bronze	1.1
FINSABM	Insert 5/8" probe aluminium bronze	1.1
FINSABN	Insert 11/16" probe aluminium bronze	1.1
FINSABO	Insert 3/4" probe aluminium bronze	1.1
FINSABP	Insert 19.5mm probe aluminium bronze	1.1
FINSABQ	Insert 10/8/6/4/3mm probe aluminium bronze	1.1
FINSABR	Insert 12mm probe aluminium bronze	1.1
FINSABS	Insert 15mm probe aluminium bronze	1.1
FINSABW	Aluminium bronze insert 7 x 3.5mm probes	1.1
FINSABZ	Aluminium bronze insert 20mm probe	1.1
FINSABAD	Aluminium bronze insert 6.5/11mm / 2x16.5mm probes	1.1
FINSABAE	Aluminium bronze insert 6/10mm / 2x13mm probes	1.1
FINSABAI	Aluminium bronze insert 2x1/4" + 6mm + 3mm probes	1.1
FINSABAJ	Aluminium bronze insert 10+8+6.5+6mm probes	1.1
FINSABAN	Aluminium bronze insert 33 probe	1.0
FINSABAO	Aluminium bronze insert 9x3mm probes	1.1