



Tecal "Field" Range of Dri-Block Calibrators

Techne has developed a range of lightweight dry-block thermal calibrators that operate from 45°C below ambient up to 650°C, for convenient field use. The three models in the Tecal F range incorporate the precision control system used on Techne's Tecal 'H' models to provide excellent reliability and accuracy, with a number of improvements such as an enhanced display resolution of 0.01°C and faster heating and cooling rates. All models offer RS-232 communications and can be used with a wide range of inserts to suit different probe sizes. Automatic fan cooling is standard, with accelerated cooling probes also available.

Tecal 140F

Technical Specifications

Low temperature Portable Field Temperature Calibrator	
Minimum temperature	45°C below ambient (typically -20°C in ambient of 25°C)
Maximum temperature	140°C
Temperature accuracy	±0.3°C
Temperature uniformity	±0.2°C
Temperature stability	±0.05°C (after 10 mins)
Display resolution	0.01°C or 0.1°F
Set point resolution	0.1°C or 0.1°F
Heating rate, 20°C to 100°C	5 minutes
Cooling rate, 100°C to 0°C	9 minutes
Large well	Ø3.8 x 11.4 cm inserts
Fan cooling	Automatic
Dimensions (W x D x H)	20.7 x 28.9 x 27.3 cm
Weight	24 lbs

~Includes one 7032534 insert and calibration certificate.



140F

Tecal 425F

Technical Specifications

Medium temperature Portable Field Temperature Calibrator	
Minimum temperature	20°C above ambient
Maximum temperature	425°C
Temperature accuracy	±0.3°C
Temperature uniformity	±0.2°C
Temperature stability after 10 minutes	±0.03°C at 200°C; ±0.05°C at 425°C
Display resolution	0.01°C or 0.1°F
Set point resolution	0.1°C or 0.1°F
Heating rate, 20°C to 400°C	12 minutes
Cooling rate, 400°C to 100°C	21 minutes
Large well	Ø3.8 x 11.4 cm inserts.
Fan cooling	Automatic
Dimensions (W x D x H)	17 x 25.5 x 27 cm
Weight	14 lbs

~Includes one 7032534 insert and calibration certificate.



425F

Options (140F & 425F)

- 10 inserts with variety of well sizes (see page 6 for full range of inserts available)
- Software and cable
- Carry case
- Cooling probe for rapid cooling of block (for 425F)

Tecal 650F

Technical Specifications

High temperature Portable Field Temperature Calibrator	
Minimum temperature	25°C above ambient
Maximum temperature	650°C
Temperature accuracy	±0.4°C
Temperature uniformity	±1°C
Temperature stability	±0.09°C (after 10 mins)
Display resolution	0.01°C or 0.1°F
Set point resolution	0.1°C or 0.1°F
Heating rate, 20°C to 600°C	24 minutes
Cooling rate, 600°C to 200°C	21 minutes
Large well	Ø38 x 152 cm inserts
Fan cooling	Automatic
Dimensions (W x D x H)	17 x 30 x 27.8 cm
Weight	21 lbs

-Includes one 7032540 insert and calibration certificate.

Options

- 10 inserts with variety of well sizes (see page 6 for full range of inserts available)
- Software and cable
- Cooling probe for rapid cooling of block
- Carry case



650F

Tecal "F" Ordering Information

Product Code	Model	Voltage	Hz	Watts	Net Weight (lbs)
FDB140FR	Tecal 140F with RS-232	230V	50/60	400	24
FDB140FS	Tecal 140F with RS-232	120V	50/60	400	24
FDB425FR	Tecal 425F with RS-232	230V	50/60	900	14
FDB425FS	Tecal 425F with RS-232	120V	50/60	900	14
FDB650FR	Tecal 650F with RS-232	230V	50/60	1100	21
FDB650FS	Tecal 650F with RS-232	120V	50/60	1100	21

Accessories	
Product Code	Model
FSC140F	Soft carry case for 140F
7032819	Soft carry case for 425F & 650F
7002590	RS232 cable*
7032395	Cooling probe for 425, 650 and 700X**

*Download TechneWorks software at no charge from our website (www.techneusa.com)

**The Cooling probe can be used to rapidly cool the insert - chilled water passes through the probe that fits inserts (3/8" OD).



Ordering Information

Tecal 140F / 140H / 425F / 425H / UCal 400+ Inserts (4.5" immersion depth)

Product Code	Description	Net weight (lbs)
7032533	Insert 5 x 1/4" probes aluminum	1.1
7032534*	Insert 3/8" + 5/16" + 1/4" + 3/16" + 1/8" probe aluminum	1.1
7032535	Insert 2 x 3/8" + 2 x 1/4" probes aluminum	1.1
7032536	Insert 2 x 1/2" + 2 x 1/4" probes aluminum	1.1
7032537	Insert 1/4" probe aluminum	1.1
7032538	Insert blank aluminum	1.1
7032574	Insert 9/16" & 1/4" probe aluminum	1.1
7032575	Insert 5/8" & 1/4" probe aluminum	1.1
7032576	Insert 11/16" & 1/4" probe aluminum	1.1
7032577	Insert 3/4" & 1/4" probe aluminum	1.1

*Included with each Tecal 140F/H, 425 F/H and UCal 400+

Tecal 650F / 650H Inserts (6" immersion depth)

Product Code	Description	Net weight (lbs)
7032539	Insert 5 x 1/4" probes aluminum bronze	2.4
7032540*	Insert 3/8" + 5/16" + 1/4" + 3/16" + 1/8" probes aluminum bronze	2.4
7032541	Insert 2 x 3/8" + 2 x 1/4" probes aluminum bronze	2.4
7032542	Insert 2 x 1/2" + 2 x 1/4" probes aluminum bronze	2.4
7032543	Insert 1 x 1/4" probe aluminum bronze	2.4
7032544	Insert blank aluminum bronze	3.3
7032570	Insert 9/16" & 1/4" probe aluminum bronze	2.4
7032571	Insert 5/8" & 1/4" probe aluminum bronze	2.4
7032572	Insert 3/4" & 1/4" probe aluminum bronze	2.4
7032573	Insert 11/16" & 1/4" probe aluminum bronze	2.4

*Included with each Tecal 650F/H