

Torrey Pines Scientific EchoTherm™ IC20 Digital Electronic Chilling/Heating Dry Bath

Features:

- Energy-efficient Peltier design
- Digital control to 1° C from -10° C to 100° C without sample block
- Control at ambient
- Count down timer (up to 30 days) with alarm and user settable Auto-Off
- RS232 I/O port for control and data collection
- Control software available for use with computer
- Built-in data logger
- Electronic calibration. User can reset to any local standard
- Small, compact size uses very little bench space
- Field operation using cigarette lighter jack in any car or truck
- 12-volt DC operation. Requires no agency safety approvals
- External power supply provided is UL, CSA and CE approved
- 12 month warranty

Applications Include:

- Maintaining 14°C for ligation reactions
- Maintaining 17° C for storing oocytes
- Storing samples at ice bucket temperatures
- Incubate samples in 96-well assay plates, or in aluminum blocks holding 0.2 ml, 0.5 ml or 1.5 ml centrifuge tubes
- Storing enzymes or DNA libraries at your work station
- Transporting samples from the field at exactly the right temperature
- Chilling or heating samples in the field
- Enzyme reactions and deactivations
- Freezing and storing most any small sample at your workstation
- PCR sample preparation
- Hybridizations
- General molecular biology applications

Chill and heat biological samples fro -10° C to 100° C (without sample block) with precise control, even at ambient temperature, in your lab or in the field on a compact, versatile and inexpensive electronic chilling/heating dry bath.

The completely solid-state EchoTherm™ IC20 Digital Electronic Chilling/Heating Dry Bath is compact, versatile, reliable and easy to use.

The chilling/heating surface is a 2.875 inch (7.3 cm) x 4.375 inch (11.1 cm) aluminum plate that is very flat for optimal contact with your sample. When unloaded, the plate surface will reach below 0° C in under two minutes. It will also heat to 37° C in approximately 3 minutes. This rate of chilling or heating may vary with the load on the plate. For instance, temperatures down to 4.0° C can be reached on a solid aluminum block as large as 4 inches (10.2 cm) x 3 inches (7.6 cm) x 6 inches (15.2 cm) in less than one hour. When insulated, these large blocks can be driven below 0° C. Temperature gradients from the centre to the edge of any aluminum block mentioned will be less than 0.5° C at any temperature.

A sample cover is available for 96-well assay plates and aluminum blocks that will hold centrifuge tubes or other samples. These blocks are available as accessories.

Available Models

Product Code	Description
TPIC20	Torrey Pines EchoTherm IC20 Digital, Electronic Chilling/Heating Dry Bath, Each

Included with Purchase

- 1 x Torrey Pines EchoTherm IC20 Digital, Electronic Chilling/Heating Dry Bath Unit
- 1 x Instruction Manual
- 1 x Power Cord



Torrey Pines Scientific Echotherm™ IC20 Digital Electronic Chilling/Heating Dry Bath



Specifications:

Torrey Pines Echotherm IC20 Digital Electronic Chilling Heating Dry Bath	
Temperature:	
Range	-10° C to 100° C without sample block
Readability	1° C
Accuracy	± 1° C
Stability	± 1° C
Sensor Type	Platinum RTD
Controller Type	PID
Uniformity	± 0.3° C
Timer:	
Range	00:01 to 30 days
Readability	1 second
Audible Alarm	Yes, alarm sounds for 1 minute. Timer counts up until turned off
Auto-off	Yes, user settable
Data-Logger:	
Sample Times	1 second, 1 minute or 5 minutes per data point
Capability	8110 data points
Electrical:	
Heater/Chiller	Peltier, 50 Watts
Operating voltages	100, 1150 or 230 VAC, 50/60 Hz input to universal power supply. 12 VDC output to chiller/heater module
Power Consumption	50 Watts maximum
Power Switch	Yes, for 12 VDC into heater/chiller module
Dimensions (Chilling/Heating Module):	
Width	6.5 inches, (16.5 cm)
Depth	8.75 inches (22.23 cm)
Height	4.0 inches (10.16 cm)
Dimensions (Power Supply)	
Length	6.5 inches (16.5 cm)
Height	3.2 inches (8.1 cm)
Width	2.2 inches (5.6 cm)
Weight (power supply & chiller/heater module)	6.5 lbs (2.9 kg)