

Portable Thermoregulators For Clip On Control

Inventors of the "Clip On" thermoregulator in 1948, Techne® now offers five "Clip On" units. These Thermoregulators will convert your existing liquid bath or container into a precision temperature controlled bath with exceptional thermal performance. They offer a full range of options such as **analog or digital set/readout, high pump output and RS232 interface.**

TE-10A



TE-10D



TU-20D



TU-20HT



TE-10A

The **TE10A** clip on thermoregulator offers a temperature range capability of -20°C to $+95^{\circ}\text{C}$, covering most routine laboratory applications. A circulating pump with external circulation connections is standard, as is adjustable over-temperature cutout.

TE-10D, TU-20D, TU-20HT

The **TE10D** Tempunit offers a temperature range capability of between -40°C to $+120^{\circ}\text{C}$. There is a digital temperature selector, circulating pump with external circulation connections, adjustable over-temperature cut-out and low liquid level cut-out.

The **TU20D** has a temperature range capability of -40°C to $+200^{\circ}\text{C}$ and incorporates the additional feature of an RS232 port.

The **TU20HT** is designed for internally circulated baths, thus it is not capable of external pumping for re-circulation, but does include a PC software and has an operating temperature range capability of -40 to $+250^{\circ}\text{C}$. For applications that require sub-ambient operation, see our [refrigeration units](#) for use in combination with the unheated baths or one of the [refrigerated baths](#) for an integrated system.

[Download the full version of TechneWorks PC software.](#) It allows you to create ramp and dwell programs and remotely control the TU20D, and TU20HT from your PC. Software is included with the TU20HT and is a free download for the TU20D.

Techne® Thermoregulator Specifications

<u>Model</u>	<u>TE-10A</u>	<u>TE-10D</u>	<u>TU-20D</u>	<u>TU-20HT</u>
Temperature range °C*	*-20 to +95	*-40 to +120	*-40 to +200	*-40 to +250
Temperature selection	analogue	digital	digital	digital
Temperature stability using water @40°C	+/- 0.01	+/- 0.01	+/- 0.005	+/- 0.005
Accuracy	+/-2.0	+/-1.0	+/-1.0	+/-1.0
Pump capacity (liters/min)	10	10	10	Internal 10 LPM only External Pumping not available
Pump capacity (mbar)	145	145	145	Internal 145mbar only External Pumping not available
Method of control	Proportional	PID	PID	PID
Temperature sensor	Thermistor	PRT	PRT	PRT
Adjustable over temperature cut out	Yes	Yes	Yes	Yes
Low liquid level cut-out	No	Yes	Yes	Yes
PC interface	No	No	Yes RS232	Yes RS232
Cooling coil**	No	No	No	No
Dimensions (mm) Extension below base	145	145	145	145
Overall size	237 x 124 x 260mm 9.3 x 4.9 x 10.2"	237 x 124 x 260 9.3 x 4.9 x 10.2"	237 x 124 x 260 9.3 x 4.9 x 10.2"	237 x 124 x 260 9.3 x 4.9 x 10.2"
Warranty	3 years parts and labor			
<p>* Minimum operating temperature is 5°C above your ambient. Refrigeration required for below ambient cooling. ** Available as an option where not supported as standard.</p>				

Ordering Information:

<u>Model</u>	<u>Catalog #</u>	<u>Voltage</u>	<u>HZ</u>	<u>Amps</u>	<u>Watts</u>	<u>Shipping Weight lbs.</u>
TE10A	1016600	240V	50/60	4.16 amp	1000	8.1
TE10A	1016100	117V	50/60	8.54 amp	1000	8.1
TE10D	1016700	240V	50/60	4.16 amp	1000	8.5
TE10D	1016200	117V	50/60	8.54 amp	1000	8.5
TU20D	1016800	240V	50/60	7.5 amp	1800	8.8
TU20D	1016300	117V	50/60	12.8 amp	1500	8.8
TU20HT	1017650	240V	50/60	7.5 amp	1800	8.8
TU20HT	1017600	117V	50/60	12.8 amp	1500	8.8

