

Stability  
±0.01°C



TE-10A

Techne® invented the "Clip On" thermoregulator in 1948 and now offers four "Clip On" units. Thermoregulators are designed to be used with the Techne® unheated water baths or any other suitable laboratory vessels. They will heat, circulate and safely control the temperature of the liquid in the bath within precise limits.

## TE-10A Tempette

- Temperature range of -20°C\* to 95°C
- Excellent temperature stability: ±0.01°C at 40°C
- Simple to use analog control
- Suitable for most routine laboratory applications
- User adjustable over-temperature cut-out for unbeatable safety

## TE-10D Tempette

- Temperature range of -40°C\* to 120°C
- Excellent temperature stability: ±0.01°C at 40°C
- 4 digit setting with a bright LED digital temperature display
- Suitable for most routine laboratory applications
- User adjustable over-temperature cut-out
- Low liquid level cut-out as standard

Stability  
±0.01°C



TE-10D

### Technical Specification

Specifications to DIN 12876	TE-10A	TE-10D
Temperature range*	-20°C to +95°C	-40°C to +120°C
Temperature selection	Analog	Digital
Temperature stability using water @ 40°C	±0.01°C	±0.01°C
Method of control	Proportional	PID
Temperature sensor	Thermistor	PRT
Adjustable over-temperature cut-out	Yes	Yes
Low liquid level cut-out	Yes	Yes
Heating/Pumping		
Nominal heater power at 120V (W)	1000	1000
Nominal heater power at 240V (W)	1000	1000
Pump capacity liters/minute	10	10
Pump capacity (mbar)	145	145
Dimensions		
Extension below base (cm)	14.5	14.5
Dimensions L x W x H (cm)	23.7 x 12.4 x 26	23.7 x 12.4 x 26

\* Refrigeration or cooling coil required for near or below ambient operation. (See Flow and Dip Coolers and the cooling coil).

## Cooling coil

Connects to the mains water supply; the water being circulated through the coil should be at least 5°C cooler than the set of the bath temperature. (Fits to any TE or TU unit).

### Ordering information

Product Code	Description
1016100	TE-10A, analog thermoregulator, -20°C to 95°C, supplied with clamp), 120V
1016600	TE-10A, analog thermoregulator, -20°C to 95°C, supplied with clamp), 240V
1016200	TE-10D, digital thermoregulator, -40°C to 120°C, (supplied with clamp), 120V
1016700	TE-10D, digital thermoregulator, -40°C to 120°C, (supplied with clamp), 240V
7011624	Cooling Coil



## TU-20D Tempunit®

- A wider temperature range of -40°C\* to 200°C
- Excellent temperature stability:  $\pm 0.005^\circ\text{C}$  at 40°C
- 1.8kW heater power for fast heat up
- 4 digit setting with a bright LED digital temperature display
- This unit incorporates an RS232 connection
- User adjustable over-temperature cut-out
- Low liquid level cut-out as standard

## TU-20HT Tempunit®

- This sophisticated Tempunit® covers a wide temperature range of -40°C\* to 250°C
- Excellent temperature stability:  $\pm 0.005^\circ\text{C}$  at 40°C
- 1.8kW heater power for fast heat up
- 4 digit setting with a bright LED digital temperature display
- RS232 connection supplied with TechneWorks software package and connecting lead as standard
- User adjustable over-temperature cut-out with an audible alarm fitted
- Low liquid level cut-out as standard

### Technical Specification

Specifications to DIN 12876	TU-20D	TU-20HT
Temperature range *	-40°C to +200°C	-40°C to +250°C
Temperature selection	Digital	Digital
Temperature stability using water @ 40°C	$\pm 0.005^\circ\text{C}$	$\pm 0.005^\circ\text{C}$
Method of control	PID	PID
Temperature sensor	PRT	PRT
Adjustable over-temperature cut-out	Yes	Yes
Low liquid level cut-out	Yes	Yes
PC Interface	Yes RS232	Yes RS232
Heating/Pumping		
Pump capacity liters/minute	10	N/A internal circulation only
Pump capacity (mbar)	145	-
Nominal heater power at 120V (W)	1500	1500
Nominal heater power at 240V (W)	1800	1800
Cooling coil	Option	Option
Extension below base (cm)	14.5	14.5
Dimensions L x W x H (cm)	23.7 x 12.4 x 26	23.7 x 12.4 x 26
TechneWorks software package	TechneWorks#	TechneWorks#

\* Refrigeration or cooling coil required for near or below ambient operation. (See Techne Flow and Dip Coolers and the cooling coil). The TU-20HT can only be used with the Dip Coolers.

# (See page 11 for details)

### Ordering Information

Product Code	Description
1016300	TU-20D, advanced thermoregulator with RS232, -40°C to 200°C, (supplied with clamp), 120V
1016800	TU-20D, advanced thermoregulator with RS232, -40°C to 200°C, (supplied with clamp), 240V
1017600	TU-20HT, advanced high temperature thermoregulator with RS232 and Techneworks software, -40°C to +250°C, (supplied with clamp), 120V
1017650	TU-20HT, advanced high temperature thermoregulator with RS232 and Techneworks software, -40°C to +250°C, (supplied with clamp), 240V



TU-20D



TU-20HT