showcase 3 – **budget** example

Model T100-P12* range ambient +5°C to 99°C, stability ±0.05°C

Economy model with digital thermostatic control unit and plastic tank for straightforward applications requiring accurate temperature control.

- **Optima™ digital thermostat (T100) for accurate temperature control**
- **Cooling/heating range ambient +5°C to 99°C**
- **Stability ±0.05°C**
- **3 programmable temperature presets**
- **Low liquid protection and fixed over temperature cut-out**

T100-P12 model shown

Visual alarm – alerts you when your attention is required

Simple-to-use rotory dial and two function keys for quick temperature setting and menu navigation

Optional removable flat lid to minimise evaporation of fluid and avoid contamination of samples

Choice of **120 V and 230 V models**

User calibration facility for optimum accuracy at the required operating temperature

Low liquid protection and fixed over temperature cut-out

Operating setpoint plus **3 adjustable preset temperatures** for convenience

Wide range of optional accessories for different applications, including test tube racks and raised shelves

Robust plastic construction, double-walled for rigidity, easy to clean

* see summary table on p. 1.6 for accessories and for other models utilising T100 control units and/or plastic tanks

Applications:

- Clinical, Microbiology and Pathology labs - media tempering, thawing & incubating samples
- Teaching labs, higher education/universities - practical demonstration/experimentation, sample preparation

Heated circulating baths – models, options and accessories

Any of the four Grant Optima™ digital thermostats can be combined with any of the Grant stainless steel and plastic tanks. The colour-coded summary table shows you the temperature range of each combination. For more details of Grant Optima™ thermostats see, p 1.8

Key to symbols

- fixed over temperature cutout
- adjustable over temperature cutout
- display
- relay
- audible alarm
- visual alarm
- timer
- 5 point recalibration
- pump
- menu system
- external probe
- program storage
- USB + RS232
- programmable
- 2 point recalibration

Heating circulators

	General purpose digital		Advanced digital	
	T100	TC120	TX150	TXF200
	 h: 335mm d: 172 mm w: 120 mm 2.5 kg	 h: 335 mm d: 172 mm w: 120 mm 2.5 kg	 h: 345 mm d: 172 mm w: 120 mm 3 kg	 h: 345 mm d: 172 mm w: 120 mm 3 kg

Tanks

Capacity (L) Outer tank dimensions	• Working area (l x w) • Min/max liquid depths • Inner tank dimensions (l x w x h) • Overall dimensions incl. controller (l x w x h)	2	2	5	5
ST5 – 5 L stainless steel  3 kg h: 200 mm l: 330 mm w: 180 mm	• 150 x 150 mm • 85/140 mm • 300 x 150 x 150 mm • 330 x 180 x 395 mm	T100–ST5 amb.+15 to 100°C	TC120–ST5 0 to 120°C	TX150–ST5 0 to 150°C	TXF200–ST5 0 to 200°C
ST12 – 12 L stainless steel  4.5 kg h: 200 mm l: 360 mm w: 330 mm	• 205 x 300 mm • 85/140 mm • 325 x 300 x 150 mm • 360 x 330 x 395 mm	T100–ST12 0 to 100°C	TC120–ST12 0 to 120°C	TX150–ST12 0 to 150°C	TXF200–ST12 0 to 200°C
ST18 – 18 L stainless steel  7 kg h: 200 mm l: 540 mm w: 330 mm	• 385 x 300 mm • 75/130** mm • 505 x 300 x 150 mm • 540 x 330 x 395 mm	T100–ST18 0 to 100°C	TC120–ST18 0 to 120°C	TX150–ST18 0 to 150°C	TXF200–ST18 0 to 200°C
ST26 – 26 L stainless steel  7.5 kg h: 255 mm l: 540 mm w: 330 mm	• 385 x 300 mm • 125/180** mm • 505 x 300 x 200 mm • 540 x 330 x 405 mm	T100–ST26 0 to 100°C	TC120–ST26 -15 to 120°C	TX150–ST26 -15 to 150°C	TXF200–ST26 -15 to 200°C
ST38 – 38 L stainless steel  11 kg h: 255 mm l: 730 mm w: 330 mm	• 575 x 300 mm • 125/180** mm • 690 x 300 x 200 mm • 730 x 333 x 405 mm	T100–ST38 0 to 100°C	TC120–ST38 -15 to 120°C	TX150–ST38 -15 to 150°C	TXF200–ST38 -15 to 200°C
P5 – 5 L plastic  2.5 kg h: 180 mm l: 240 mm w: 330 mm	• 120 x 150 mm • 85/140 mm • 240 x 160 x 150 mm • 390 x 200 x 380 mm	T100–P5 amb.+15 to 99°C	TC120–P5 amb.+15 to 99°C	TX150–P5 amb.+15 to 99°C	TXF200–P5 amb.+15 to 99°C
P12 – 12 L plastic  3.5 kg h: 180 mm l: 415 mm w: 350 mm	• 210 x 280 mm • 85/140 mm • 325 x 280 x 150 mm • 415 x 350 x 380 mm	T100-P12 amb.+5 to 99°C	TC120–P12 amb.+5 to 99°C	TX150–P12 amb.+5 to 99°C	TXF200–P12 amb.+5 to 99°C
P18 – 18 L plastic  5 kg h: 180 mm l : 600 mm w: 365 mm	• 280 x 325 mm • 85/140 mm • 510 x 290 x 150 mm • 600 x 350 x 380 mm	T100–P18 amb.+5 to 99°C	TC120–P18 amb.+5 to 99°C	TX150–P18 amb.+5 to 99°C	TXF200–P18 amb.+5 to 99°C

Note: operation at or below ambient temperatures requires accessory cooling or a refrigeration unit on page 2.6

Options and accessories

Labwise™ PC software (optional)				
Allows two-way communication for status display, programming and data capture (see p. 3.1 for more information) USB/RS232 cables provided	–	–		
External probes (optional) for monitoring and controlling temperature of remote loads				
TXPEP flexible plastic probe, 3m cable	–	–	●	●
TXSEP stainless steel probe, 3m cable	–	–	●	●
Remote switching device (optional)				
For switching appliances on and off (up to max. 8 Amps)	–	–	1	1
Vertical turbine pumps (optional)*				
Low noise, compact design. Supplied with pipe connections and special lid for fitting to tank, pipe bore 12.7 mm **VTP 1** max. pressure 1000 mbar max. flow 9 L/min **VTP 2** max. pressure 1650 mbar max. flow 12 L/min		Required only where application demands a higher pressure than that delivered by the internal pump to maintain flow		

* when pump is fitted, available working area is reduced ** maximum depth can be increased by 10 mm, by removing the circulation tray in 18, 26, 38 litre baths, with slight loss of performance