

InstCube Temperature Control 1

Temperature Control System

The *InstCube Control 1* is designed for precise temperature control of heating (or cooling) equipment with loads of up to 13 amps (3KW). Consisting of a wall-mounting or bench-top compact ABS plastic enclosure with an Omron E5CC digital PID temperature controller, 25A rated Solid State Relay (SSR) and a 13A mains socket. It is designed for precise control of heating (or cooling) equipment that is fitted with a standard 13A UK mains plug. The controller displays the current temperature measured by a temperature sensor. Two standard models are available, with connectors and configuration for different temperature sensors (ordered separately); Pt100 RTD and Type K Thermocouple. We can also customise them for other types of thermocouple.

- Wall-mounting or bench-top.
- Autotune set-up function sets optimum PID control term values for your process.
- Output Minimum On, and Off, time can be set.
- Setpoint Ramp Rate can be set to ensure a gradual increase (or decrease) in temperature.
- °C or °F display, 0.1° or 1° resolution



Type K model Pt100 model

Specifications

Type K model INSTCUBEABSCTL1-K	Type K Thermocouple via Universal size socket (takes mini or standard plug). -20.0 to 500.0°C (default) or -200 to 1300°C (if reconfigured).
Pt100 model INSTCUBEABSCTL1-PT	2 or 3-wire Pt100 RTD via 3-pin miniature copper socket. Preconfigured for room control applications (0.0-100.0°C) by default, but can be reconfigured by the user (-199.9 to 500.0°C or -200 to 850°C).

Controlled Output: 13A UK mains (BS 1363) socket

Supply Voltage: 230Vac (±10%), 50Hz, via 13A UK mains (BS 1363) plug (13A fused).

Dimensions: 200 x 150 x 110mm (W x H x D)

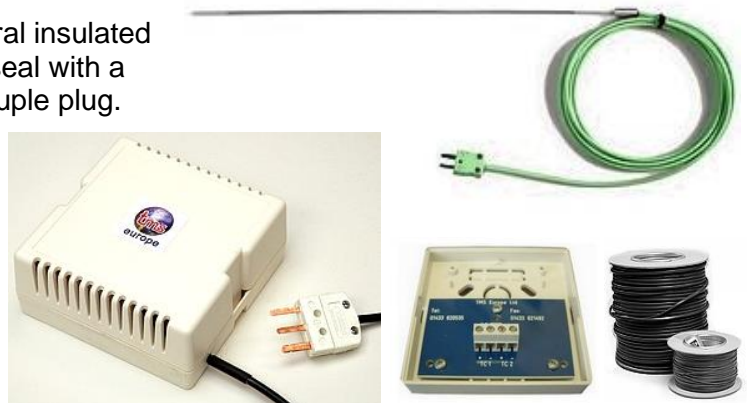
IP Rating: IP20

Thermocouple Temperature Sensors

Type K thermocouple, in a 3mm diameter mineral insulated sheath, 300mm long, terminated in a plain pot seal with a 2m long flexible lead with a miniature thermocouple plug. Suitable for 0 - 1100°C for continuous use.

Pt100 Temperature Sensors

Wall mount Pt100 sensors, ideal for measurement of room temperature can be ordered pre-wired with a 2m lead and 3-pin mini plug. Or connecting cable reels (10m, 25m, 100m length) and plugs can be ordered separately.







A wide range of other standard and bespoke thermocouples and Pt100s are also available from TMS.

Prices Exclude VAT and Delivery. Specification and price subject to change without notice. All trademarks acknowledged.

In addition to our standard models, over the years TMS has produced a variety of customised units. These include units with 110V supply voltage and output. Voltage and current indication. Eurotherm controllers with 0.01°C resolution and RJ45 digital communications for remote monitoring. Atypical output connectors (preventing the load equipment being powered without the control box). Higher powered 16A and 32A rated versions. Combined temperature control and over-temperature protection units. Typical lead-times on bespoke units are 2-5 weeks. Please contact us with your requirements for current pricing and availability.



InstCube range from TMS Europe

			
InstCube Temperature Control 1	InstCube Over-Temperature Protection & Alarm (OTP1)	InstCube Indicator & Alarm Units	InstCube nanodac Recorder Units
INSTCUBEABSCTL1...	INSTCUBEABSOTP1...	INSTCUBEABSIND1...	
Precise PID temperature control of heating (or cooling) equipment. Applications including room temperature control for building material research, liquid mixtures on hotplates and small scale R&D projects.	Over-temperature protection alarm unit for retrofitting as a safeguard to existing equipment. No wiring, no fuss. Acts a 'policeman' to prevent the set temperature being exceeded by turning off the power. With audible and visual alarm indicators.	Temperature monitoring display, with audible and visual alarm indicators. Up to 3 alarms. Splash proof options.	4 channel temperature recorder with audible and visual alarm, using the Eurotherm nanodac. Data export via USB or RJ45 Ethernet.



TMS Europe Ltd was established in 1979 and has designed and manufactured the InstCube range in the UK since 2009.



Calibration

We can offer the option of UKAS calibration of the instrument and a temperature sensor, as a system, at your choice of temperature(s) with a calibration certificate issued reporting the tested system's measurement at each temperature. The typical lead-time is 6 - 10 working days. Please contact us with your requirements for a quotation.

TMS Europe Ltd is a UKAS accredited calibration laboratory No. 0461. We are ISO 17025 accredited for calibration on site and in our laboratory, as defined in our Schedule Of Accreditation (see www.tmseurope.co.uk/soa).



After Sales Service & Warranty

Each unit has a 1 year return to base warranty against manufacturing defects from the date of purchase from TMS Europe and covers normal use of the unit in accordance with its instruction manual. Under the warranty any manufacturing defects will be rectified by TMS Europe at no charge. 'Return to base' means the customer is responsible for return of the unit to TMS Europe's factory (Derbyshire, UK) for assessment with a view to repairing under warranty. For any work performed that is solely covered by the warranty TMS Europe will provide return shipment of the unit within the UK and Republic of Ireland at no charge. Whilst TMS Europe stocks a range of spares and aims to resolve any warranty repairs quickly, typically within 3 - 8 working days, the warranty does not guarantee this or any provision of a loan unit while the customer's unit is with us.

Part of a range of thermal solutions from TMS Europe

