

# **SAT-2** Room Temperature Controller



Zone components installed. Swing button only applicable to underceiling units.

# **User Friendly**

temperzone's SAT-2 room thermostat controller has been designed to maintain a high level of comfort for room occupants. Emphasis has been placed on providing controls that are easy to use — despite the sophisticated microprocessor system that runs it. Use of the Auto and Timer function settings allows you to 'set it and forget it'.

The thermostat is relatively inexpensive and has proven very reliable.

#### **Features**

- Cool / Dry / Fan modes.
- Heat / Auto modes.
- Auto / High / Medium / Low fan speed selection.
- Hot Start and Hot Keep function in heating mode.
- Reverse Cycle, or Cool + Electric Heat option.
- · Auxillary Electric Boost Heat control.
- Temperature setting range from 16°C 30°C.
- LED to indicate status of the unit [Power On/Off].
- Room temperature display.
- Real time clock.
- 7 day timer two start and/or stops per day
- On demand countdown run timer, up to 9 hours.
- Auto-Restart or No Restart after power failure.
- Continuous or Intermittent selection of fan run-on in dead zone.
- Backlit screen for ease of reading; changes colour for each mode.
- Soft touch tab keys
- Battery backup (3V Lithium CR2032).
- Sleep function.
- Zone Control up to four zones.
- Audible beep to acknowledge key entry or wireless remote control.
- Low voltage control cable.
- Colour: white and light grey (Keypad gold and blue).
- Optional:

Infra Red Remote controller

Remote return air sensor.

Extended interface lead,

Zone Control board,

Zone Control transformer 220/240V to 24V ac, 65VA.

Extra Wall Control plaque.

# SAT-2 Room Temperature Controller

# Compatibility

This SAT-2 is compatible with temperzone DX air cooled and Hydronic systems, single or two stage systems, and is available:

- 1. Supplied complete with selected temperzone Ducted Splits (ISD/L), Underceiling (ISU) and Packaged Rooftop (OPA), Packaged Water Sourced (HWP) air conditioners, and
- 2. Supplied as a kit for retro-fitting to other temperzone units not already supplied with a thermostat.

The SAT-2 Wall Control sends instructions to the SAT-2 Controller board (PCB) which is mounted, either:

- (a) inside the electrical box of a ISD indoor unit, or
- (b) on the electrical board for an OPA.

#### **SAT-2 Thermostat Kit**

The SAT-2 is comprised of two main components:

- (1) Controller board (PCB), and
- (2) Wall Plaque remote mounted.

The temperature sensor (thermostat) is located in the back of the wall plaque. A single remote thermostat option is also available that plugs into the wall plague; the temperature reading will be averaged between the two temperature sensors.

### **Zone Control**

The **temperzone** SAT Zone Control kit is an add on option to allow up to 4 zone dampers to be switched from the SAT-2 wall control. Standard damper motors, 230/240 volt or 24 volt, can be used with drive open/ drive close or drive open/spring closed.

## **Remote Air Temperature Sensor/s (option)**

The air temperature sensor is by default located in the Wall Plaque. Optional remote air temperature sensors are available so that the measurement of the room temperature can be taken away from the wall plaque, eg. elsewhere in the room or in the return air duct.

Remote sensor's can be plugged directly into the Controller board (PCB). This board accepts up to four sensors which are designated as 'zones' one to four. The first return air sensor will automatically replace the Wall Control sensor and should be located in the same room as the Wall Control. The Controller will always use the average of the zones selected. Refer to the separate installation instructions supplied with the PCB for further details.

All remote sensor wires must be run separately and away from main power supply wires, including the interconnecting cable.

#### **Further Information**

Additional SAT-2 Support Information is available at www.temperzone.biz including troubleshooting tips and user

### **SAT-2 Thermostat Kits**

Item No.	Description
525-001-014	SAT 2.1 Thermostat Kit for 230V systems for retro-fitting on ISD/L 55–280K & OPA 100–178RKT
525-001-016	SAT 2.1 T/stat Kit for 24V & two stage sys. for retro-fitting on ISD 298–950K & OPA 205–960RKT

#### **Accessories**

Description
Remote Return Air Duct Sensor c/w 5 m lead
Remote Wall Mtd Air Sensor - in box, excl. lead, single bead RS1
Remote Wall Mtd Air Sensor - in box, excl. lead, twin bead RS2
Sensor lead (excl. sensor) - 1.5 m
Sensor lead (excl. sensor) - 6 m
Sensor lead (excl. sensor) - 12 m
Sensor lead (excl. sensor) - 25 m
Interface Cable 10 m
Interface Cable 20 m
Indoor Unit-to-Outdoor unit connection lead (7 core) 12.5 m
Indoor Unit-to-Outdoor unit connection lead (7 core) 25 m
SAT Zone Control Kit
230V / 24V Transformer (65VA)
SAT Infra Red Remote Controller
SAT-2.1 Wall Control plaque (additional)

# **Warranty**

The SAT-2 is warranted as a spare part for 12 months in Australia and New Zealand. When supplied complete with a temperzone air conditioning system, the warranty is 5 years but only if the system has been installed by a temperzone Approved Installer.

The manufacturer reserves the right to change specifications at any time without notice or obligation.



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