

SMT-131

Hotel Thermostat

Making Life Comfortable

General Description

Smart Temp staff recently travelling, were frustrated by the many different types of air conditioning controls found in their hotel rooms. Some had simple On/Off switches which did not permit accurate control of the temperature or the fan. Others were a mass of crazy symbols and strange icons flashing on the screen. All we wanted was to set a comfortable room temperature. It was then we realised, necessity really was the mother of invention.

Smart Temp vowed to develop a room air conditioning controller that would satisfy hotel guests and hotel management alike.

After many months of research we soon realised that air conditioning in the hotel industry places special demands on the controlling thermostat. It must be robust and capable of controlling a wide variety of air conditioning systems. It must also control energy usage while maintaining the comfort of the guests using the room but most of all it must be intuitive - no strange symbols, no confusing icons, no need to read the printed sheet glued to the wall next to the thermostat before you can become comfortable in your room.

Guests walking into a hotel room must instantly know how to operate the air conditioning and set a comfortable temperature. Not meeting this expectation means your guests will leave unhappy, vowing never to return or at best call for assistance thereby tying up your staff.

The SMT-131 offers a big bright display that provides feedback of the air conditioning status and permits the guest to easily turn the airconditioning on/off and adjust temperature/fan control. If the optional occupancy module is fitted, the SMT-131 will automatically change to a low energy consumption mode when the room is vacant. The optional outside door station module further adds to the capability of the SMT-131 by providing the guest with the ability to call for housekeeping or request that they are not disturbed.

The SMT-131 provides a total solution for air conditioning control and by adding optional logic modules, extends the SMT-131 capabilities further.



Features

Bright Backlit Touch Screen

Intuitive Operation

Relay Outputs

Single or Three Fan Speed Control

Heat Pump or Heat Cool Control Logic

0-10V Valve Control Logic

Extensive Installer Options Menu

- Temperature Control Limits
- Auto Off Timer
- Dead Band Adjustment
- Fan Purge Period
- Backlight Level etc...

Integrated Modbus RTU Communications

Integrated Temperature Sensor on Wall Controller

Optional Remote Sensor(s) Available

Occupancy Input

Optional Door Station Input (shown)

Door Bell Function

Full Local Product Support

Designed and Built by Smart Temp Australia

Comprehensive 3 Year Warranty RTB

Installer Options

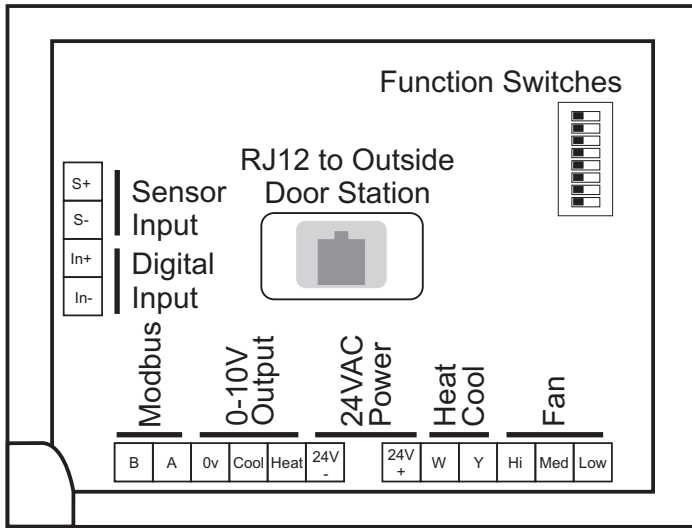
LCD Display Units	Deg C / Deg F
High Set Temperature Limit	5 to 45°C
Low Set Temperature Limit	6 to 46°C
Dead Band	+/- 0 to 5°C
Heat /Cool Span	0.5 to 1.5°C
Fan Purge	Off to 10 Mins (1 Min Steps)
0-10V Heat Span	0.5 to 5°C
0-10V Cool Span	0.5 to 5°C
Auto Off Timer	0 (Off) to 12 Hours (30 Min Steps)
Unoccupied Heat Set	0 (Off) to 35°C
Unoccupied Cool Set	5 to 50°C (Off)
Unoccupied Fan Mode	Low / Med / High / Auto
Backlight Level	Active / Standby
Remote Sensor	Remote / Average
Digital Input Options	Bell / Occupied
Fan Rest Mode	Refresh / Hold
Modbus Address	1-255
Modbus Baud	4.8K 9.6K 19.2K 38.4K

Switch Functions

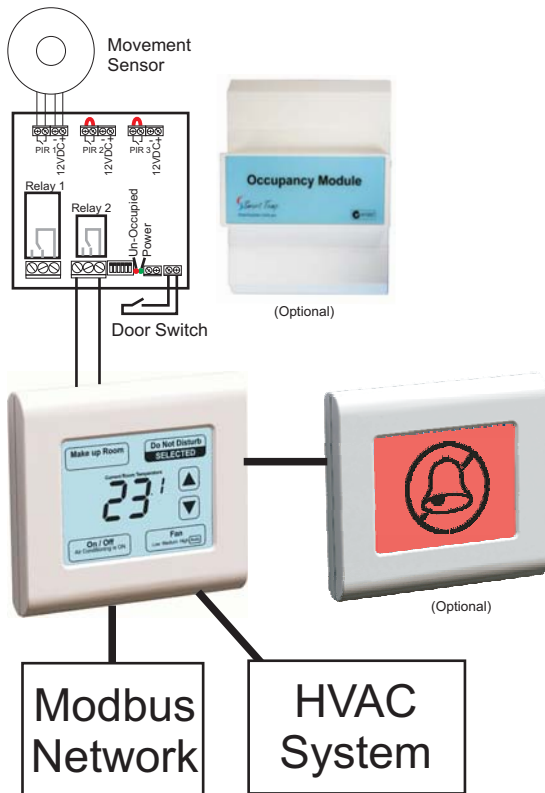
	Off	On
Sw 1 - Fan Speed	1 Speed	3 Speed
Sw 2 - A/C Equip	Heat & Cool	Heat Pump O/B Terminals
Sw 3 - Reversing Valve When Sw2 = ON (HP Mode)	Energized Cool (O)	Energized Heat (B)
Sw 3 - Fan Mode When Sw2 = OFF (HC Mode)	Fan by Heater (HG)	Fan by T'stat (HE)
Sw 4 - Anti Cycle Delay	Off	4 Minutes
Sw 5 - Reserved		
Sw 6 - Reserved		
Sw 7 - Ventilation Md	Off	Permitted
Sw 8 - Door Station	Not Used	Fitted

Condensed Modbus Objects

Coil Status	5 Coils
Room Temperature	0.1°C Resolution
Guest Set Point	0.5°C Resolution
Thermostat Status	On / Off
Unoccupied Heat Set Point	0.5°C Resolution
Unoccupied Cool Set Point	0.5°C Resolution
Fan Speed	Off / 1 / 2 / 3 / Auto
Fan Mode	Auto / Manual / Ventilation
Fan Purge Period	0-10 Mins
Unoccupied Heat Set	0.5°C Resolution
Unoccupied Cool Set	0.5°C Resolution
Unoccupied Fan Mode	Off / 1 / 2 / 3 / Auto
Room Occupancy	Empty / Occupied
Digital Input Status	On / Off
House Keeping Called	Yes / No
Do Not Disturb Called	Yes / No
Contact Reception	On / OFF
Temp Display	C / F
Switch Settings	Binary
Heating / Cooling Called	0.1°C Resolution
0-10V Heat Output	Output Voltage 0.1V Resolution
0-10V Cool Output	Output Voltage 0.1V Resolution
Call Chime	On / Off
High Temperature Limit	5 to 35°C
Low temperature Limit	6 to 36°C
Equipment Hysteresis	0.5 to 1.5°C
Auto Off Period	Off to 10 Hours
Back Light Options	Off / On / High / Low / Auto
Modbus Baud	4.8 / 9.6 / 19.2 / 38.4k



Typical Wiring (Full System)



Condensed Specification

Power	24V +/- 20% 50/60 Hz
Relay Outputs	5 Relays - Fan Low/Med/Hi/ Heat/Cool
Analogue Outputs	Heat / Cool
Operating Temperature	-5 to 50°C
Operating RH	0 to 95% (Non Condensing)
Relay Voltage	24VAC @ 1 Amp Max
0-10 Outputs	5mA Max
Warranty	3 Year RTB
Communications	Modbus RTU 4.8 / 9.6 / 19.2 / 38.4k
Size	103 x 113 x 26mm

Designed and Manufactured by Smart Temp Australia 2010

