

SMT-455 Voyager

Universal Thermostat

4" Colour Touch Screen Thermostat

With Wi-Fi

Making Life Comfortable

General Description

Smart Temp "Voyager" SMT-455 Thermostat

Since its establishment in 2000, Smart Temp has built a strong reputation for engineering high-quality, innovative control solutions that address the evolving needs for comfort and efficiency. The SMT-455 "Voyager" thermostat exemplifies this commitment.

Versatile Control for Any HVAC System

The Voyager thermostat provides exceptional flexibility for controlling various HVAC systems. With 5 relays, 3 programmable universal outputs, and 3 universal inputs, the Voyager is designed for adaptability. It connects directly with temperzone air conditioners via RS-485 for high-level control using AB connections. An optional protocol converter allows seamless integration with other popular inverter brands such as Daikin, Mitsubishi, and Fujitsu.

The Voyager can control it all -

- 5-Stage Heat Pumps with multi fan speeds.
- 4 separate stages of heating and cooling with fan control.
- Open / Close or 0-10V valves.
- Hydronic Systems.
- Fan Coils.
- All popular Inverters (with optional Protocol adapter)

Adaptive User Interface for Commercial and Residential Use

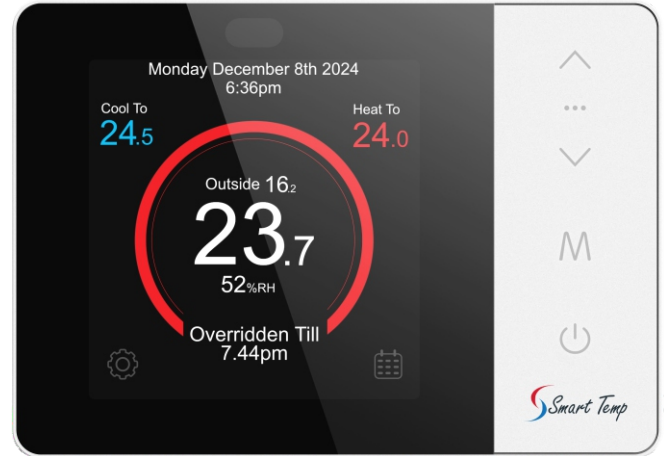
The Voyager can be customized to meet the standards of commercial HVAC systems, complying with Australia 1668.2 BCA. It offers commercial start/stop programming, after-hours run timers, and the option to control an outside air economy cycle—making it an ideal choice for commercial applications.

For residential use, the Voyager provides a straightforward residential "Set-Back" interface, intuitive scheduling, and user-friendly logic.

If automatic time-clock control isn't required, the Voyager can function as a manual thermostat, easily switched on or off as needed.

Control From Anywhere

With Tuya WiFi integration, the Voyager thermostat offers remote control capabilities from virtually anywhere with WiFi access—whether you're on your couch at home or halfway across the world.



Condensed Features

Full Wi-Fi Control with a free mobile app (Tuya Based)

ModBus RTU and BACnet MSTP Outputs

BLE Wireless Sensors (optional)

Heat Pump, Heat Add-On- Cool and 0-10V Valve Control

Inverter AC Compatibility with support for all major brands

Single Fan, Multi Speed Fan or DC Fan Control

Up to 5 Compressor Stages (with Lead lag)

Up to 4 Stages of Heat and 4 Stages of Cool

4" Colour "Capacitive" Touch Screen

Commercial / Residential Scheduling or Manual

Rh Monitoring with Control Outputs

NDIR CO2 with Control Outputs (optional)

Occupancy Detecton

Simple to Navigate Installer Options Menu

Full Local Product Support

Designed and Built by Smart Temp Australia

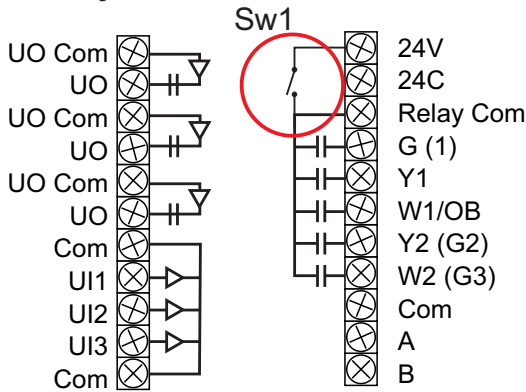
Comprehensive 3 Year Warranty RTB



Typical Wiring (Full System)

Installer Menu

Terminal Layout



- 24C Power Common
- 24 24VAC Power (12 ~30V AC or DC)
- R Relay common for main 5 relays
- G(1) Fan (Fan low)
- Y1 Compressor 1 / Cool 1
- W1 (O/B) Reversing Valve / Heat 1
- Y2 Compressor 2 / Cool 2
- W2 Aux / Emer Heat / Heat 2
- UO 1 to 3 These outputs have assignable function
- UI 1 to 3 These inputs have assignable functions
- Communication A RS-485 Coms A
- Communication B RS-485 Coms B

Switch Settings

- SW 1** Closed - 24V internally connected to Relay Common
Open - Relays Volt free
- DIP 1** Off Single Fan Speed
ON Multiple Fan Speeds
- DIP 2** Off Heat Cool Control
ON Heat Pump Control
- Dip 3** Off Rev Valve In Cool / Fan Gas
On Rev Valve in Heat / Fan Elect
- Dip 4** Off Conventional Control (relays etc)
ON Inverter Control via optional Adapter
- DIP 5 ~ 8 Reserved - Leave OFF**

The SMT-455 Voyager thermostat features a secure, PIN-protected installer menu, granting qualified personnel the ability to adjust control parameters. This menu allows for customization of the user interface, connected HVAC systems, and advanced functions, ensuring optimal performance tailored to specific needs.

Pre-configured with default settings suitable for most applications, the Voyager also offers an intuitive menu design, making navigation and customization straightforward when adjustments are required.

Installers can define critical settings such as the number of heating and cooling stages to control, the action points for these stages, and whether the Voyager operates a conventional HVAC system or advanced inverter systems via a Smart Temp protocol adapter.

Additionally, the Voyager supports advanced control features, including 0–10V valve modulation, automatic occupancy detection, and the ability to utilize outside air for free cooling when suitable.

The SMT-455 Voyager Thermostat is truly a universal control, equally suitable to be used as a simple residential thermostat or a advanced commercial HVAC solution.

Additional Inputs options

The SMT-455 Voyager thermostat features three versatile Universal Inputs, each with an extensive library of assignable functions. These inputs provide unparalleled flexibility, allowing you to customize the thermostat to suit your specific application needs.

To configure these inputs, simply access the SMT-455 Installer menu, select the desired Universal Input, and assign the appropriate function.

The available functions include

- Monitoring remote room temperature
- Averaging room temperature with the onboard sensor
- Measuring outside air temperature

Additionally, these inputs can serve as digital triggers for various applications, such as:

- Water flow verification
- Fault or fire detection
- Forcing the SMT-455 to turn on or off

With such a broad range of capabilities, the Universal Inputs empower installers to adapt the SMT-455 Voyager thermostat to even the most complex HVAC scenarios.

