TECHNICAL SPECIFICATIONS

HVAC Thermostat

HSC6 (model HSC6S-HP)

Engineering data for the HSC6S-HP Z-Wave 800 Series 24 VAC thermostat.

Rev. 1.0 | October 2026



Electrical and control

Power supply	24 VAC (20 to 28 VAC) from the HVAC system transformer
Power consumption	Less than 1 W
Relay output	Less than 1 A per output, resistive load
Supported systems	Conventional: up to 2 heat and 2 cool stages. Heat pump: up to 2 compressor stages with auxiliary and emergency heat. 3-wire zone valve
Setpoint range	68 to 77 °F (19 to 28 °C), default
Control accuracy	±1 °F (±0.5 °C)
Temperature display range	0 to 60 °C
Display resolution	0.1 °C / 1 °F
Compressor protection	0 to 10 min delay, default 1 min
Fan circulation	0 to 30 min run time per 30 min cycle, default 11 min

Radio and Z-Wave

Protocol	Z-Wave 800 Series
Frequency	US **908.42 MHz**
Security	S2
Command classes (S2)	Version, Manufacturer Specific, Device Reset Locally, Multilevel Sensor, Thermostat Setpoint, Thermostat Mode, Thermostat Operating State, Thermostat Fan Mode, Thermostat Fan State, Time, Time Parameters, Configuration, Association, Multi Channel Association, Association Group Information, Firmware Update Meta Data
Command classes (non-secure)	Z-Wave Plus Info, Transport Service, Security 2, Supervision
Association groups	1 (Lifeline, 1 node)

Lifeline reports

Group	Max nodes	Report	Trigger
1 (Lifeline)	1	Multilevel Sensor Report (temperature, humidity)	Temperature or humidity changes by more than the value in parameter 2 or 3

Group	Max nodes	Report	Trigger
1 (Lifeline)	1	Thermostat Mode Report	Thermostat mode changes
1 (Lifeline)	1	Thermostat Operating State Report	Operating state changes
1 (Lifeline)	1	Thermostat Setpoint Report	Setpoint changes
1 (Lifeline)	1	Device Reset Locally Notification	Factory reset

Mechanical

Dimensions (W x H x D)	136 x 94 x 26 mm (5.35 x 3.70 x 1.02 in)
Housing	Tempered glass front, PC body
Mounting	Baseplate on junction box with M4 x 18 mm screws, 60 mm hole pitch
Use	Indoor only

Terminals

Terminal	Definition
R	Power for heating. Connect to the secondary side of the heating system transformer
RC	Power for cooling. Connect to the secondary side of the cooling system transformer
C	Common wire for the secondary side of the cooling or heating transformer
W	Heating, stage 1
W2	Heating, stage 2 or auxiliary heat
O/B	Changeover valve (heat pump)
Y	Compressor, stage 1
Y2	Compressor, stage 2
G	Fan
K	Connection to the wire saver module (4-5T module)

Supported system types

Set the system type with parameter 30. ● = terminal must be wired. ○ = optional.

Type	System	G	Y	Y2	W	W2	O/B	Diagram
0	One-stage conventional, cool only	●	●					Fig. 0
1	Two-stage conventional, cool only	●	●	●				Fig. 1
2	One-stage conventional, heat only	●			●			Fig. 2
3	One-stage conventional, heat only, no fan				●			Fig. 3
4	Two-stage conventional, heat only	●			●	●		Fig. 4
5	One-stage conventional, heat and cool	●	●		●			Fig. 5, 5-2

Type	System	G	Y	Y2	W	W2	O/B	Diagram
6	Two-stage conventional, heat and cool	●	●	●	●	●		Fig. 6, 6-2
7	Heat pump, one-stage cool	●	●				○	Fig. 7
8	Heat pump, two-stage cool	●	●	●			○	Fig. 8
9	Heat pump, one-stage heat (aux optional)	●	●			○	○	Fig. 7, 9-2, 9-3
10	Heat pump, two-stage heat (aux optional)	●	●	●		○	○	Fig. 8, 10-2, 10-3
11	Heat pump, one-stage heat and cool (aux optional)	●	●			○	●	Fig. 11, 11-2, 11-3
12	Heat pump, two-stage heat and cool (aux optional)	●	●	●		○	●	Fig. 12, 12-2, 12-3
13	One-stage conventional, heat only, 3-wire zone valve, no fan		●		●			Fig. 13

Compliance

Radio	FCC Part 15. FCC ID: **[TBC: confirm FCC ID on product label]**
Z-Wave certification	**[TBC: Z-Wave Alliance certification in process. Add certificate number when issued]**
Safety listing	**[TBC: confirm UL or ETL listing for the US market]**

Specifications can change without notice. For installation, configuration, and safety information, read the user manual.