**SPECIFICATIONS**

Haseman DRS6-AI
Z-Wave, DIN Rail, 6 x 2kW
Universal Switch module

- 6 independent relay outputs.
- Capable to control AC and/or DC loads
- Flexible power supply: 110 - 240VAC, 50/60Hz or 12VDC.
- Two Analog Inputs: 0-10V and 4-20mA (for general use).
- Binary Input for any type of discrete sensors with dry contact.
- 1-Wire temperature Input (sensor DS18B20 included!)
- Maximum AC output: 10A / 110 -230V (resistive load).
- Maximum DC output: 12A / 12 - 30V.
- 16A rated PCB power tracks and terminals.
- Conforms to EU regulations: EN55022 EN61000-6.
- To be mounted on standard DIN Rail.
- Radio protocol: Z-Wave, 868MHz.
- Antenna range: up to 50m outdoor / 30m indoor.
- Remote control of the outputs via the Z-Wave network and local control by momentary switches.
- Compatibility: Fully compatible with Fibaro HC2, Fibaro HC Lite, RaZberry2, Z-Wave Me ZME UZB1. Basic functionality with Vera Plus and Vera Edge.

CONNECTION
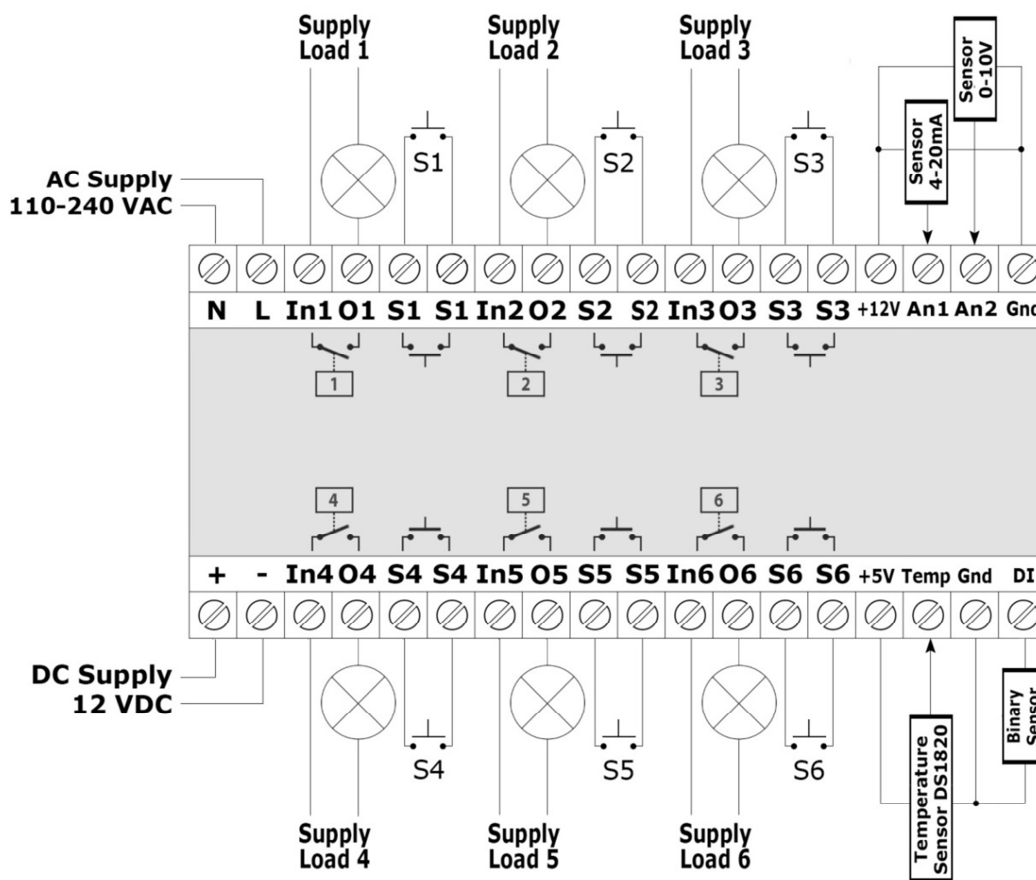
- Each Output could be used to control Low or High Voltage, DC or AC Loads, independently.
- Only voltage free, momentary switches must be connected to terminal couples S1 to S6!
- The module could be supplied by 110–240VAC, 50/60Hz or 12VDC.

Analog Input 4-20mA

Sensor 4-20mA

Current loop 4-20mA

+12V An1 An2 Gnd

Generic Sensor

⊘ 11:35   52 %

%
100
75
50
25
0 4 12 20 25 mA

Analog Input 0-10V

Sensor 0-10V

0-10V

+12V An1 An2 Gnd

Generic Sensor

⊘ 11:35   55 %

%
100
75
50
25
0 5 10 12 V

1-Wire Temperature Input

+5V Temp Gnd DI

Temperature Sensor

⊘ 12:00   28 °C

DS18B20 TYPICAL ERROR CURVE

ERROR °C
0.5
+3s ERROR
0
-3s ERROR
MEAN ERROR
-0.5
10 20 30 40 50 60 70

Binary Input

+5V Temp Gnd DI

Voltage free Contact

Door Sensor

⊘ 11:22   on

Door Sensor

⊘ 12:00   off

- **ALWAYS observe the polarity and voltage limits of analog inputs!**
- Max load on +12V terminal: 200mA
- Max load on +5V terminal: 100mA
- Max. voltage on 0-10V input: 12VDC
- Max. current on 4-20mA input: 25mA
- Only **voltage free** contacts must be connected to the binary Input (relay contacts, door/window sensors, pressure switches, thermostats, high/low level sensors, etc.)

105

57

86
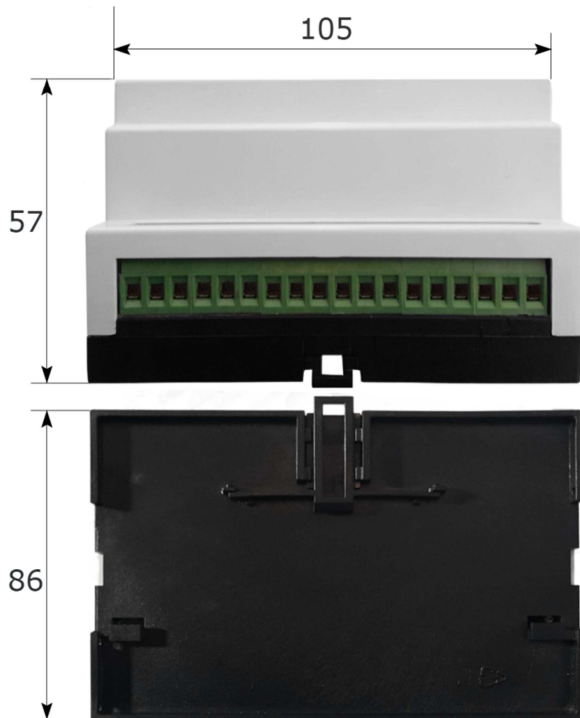
Z-WAVE NETWORK INCLUSION / EXCLUSION

The device can be included into the Z-Wave network by the Include/Exclude button, located on the right side of the module.

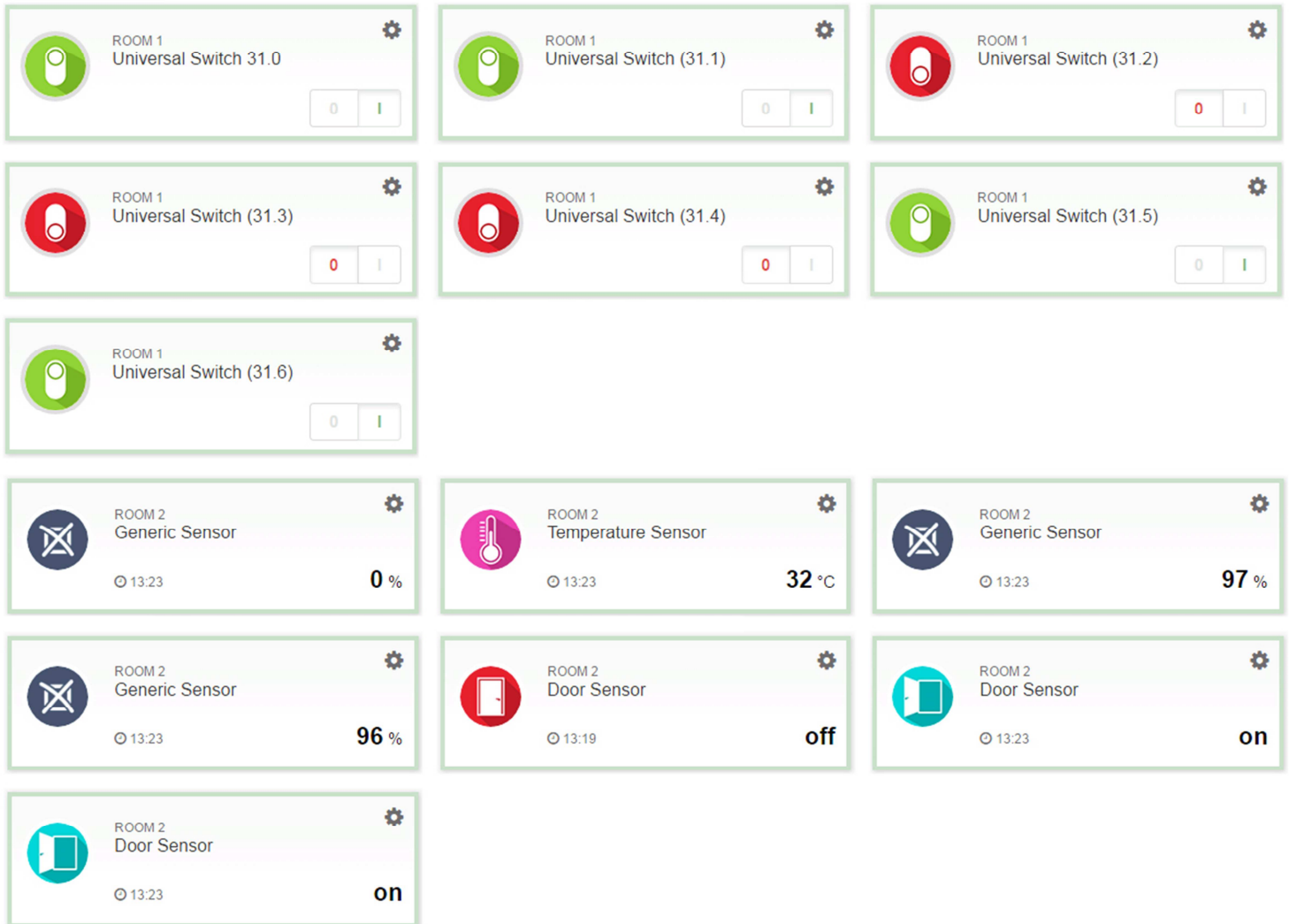**Adding the module to the Z-Wave network:**

1. Connect the module to voltage supply.
2. Set the Z-Wave network main controller into learning mode (inclusion).
3. Triple click the Include/Exclude button.
4. The module will be automatically recognized and included in the Z-Wave network as a 6 channel switch, plus 4 input channels.

After inclusion there will appear 7 switches, 3 analog inputs, one temperature sensor and 3 binary inputs on the main controller UI.

ID **XX.0 -** Main Node (also controls output 1).
ID **XX.1** – ID **XX.6** – correspond to outputs O1-O6.

After including, you can rename the Nodes according to your current project needs.

ROOM 1 Universal Switch 31.0	ROOM 1 Universal Switch (31.1)	ROOM 1 Universal Switch (31.2)
0 I	0 I	0 I

ROOM 1 Universal Switch (31.3)	ROOM 1 Universal Switch (31.4)	ROOM 1 Universal Switch (31.5)
0 I	0 I	0 I

ROOM 1 Universal Switch (31.6)		
0 I		

ROOM 2 Generic Sensor	ROOM 2 Temperature Sensor	ROOM 2 Generic Sensor
13:23 0 %	13:23 32 °C	13:23 97 %

ROOM 2 Generic Sensor	ROOM 2 Door Sensor	ROOM 2 Door Sensor
13:23 96 %	13:19 off	13:23 on

ROOM 2 Door Sensor		
13:23 on		

Removing the module from the Z-Wave network:

1. Connect the module to voltage supply.
2. Set the Z-Wave network main controller into learning mode (exclusion).
3. Triple click the Include/Exclude button.