

smart-house Aurora line, Multiple Sensor Type SHA4XLS4TH

CARLO GAVAZZI



- Light switch for building automation with integrated sensors for temperature and humidity
- Developed to fit into wall socket and frames from Fuga, NIKO, and Bticino
- 4 individually programmable pushbutton inputs
- Supplied by bus, no external supply required
- Delivered with 2 white and 1 black pushbutton covers
- White LEDs: programmable guide light function
- Blue LEDs: programmable function status
- Temperature range: -40 to +60°C
- Humidity range 5 to 95 %

Product Description

The SHA4XLS4TH is a light switch with 4 buttons and 4 LED outputs which integrates a temperature and a humidity sensor just in one item. It is developed to be mounted into the 44 x 44 wall socket and frame from Fuga, Niko and into all the 44 x XX Bticino ones. This light-switch with its integrated sensors is part of the smart-house concept for

building automation applications. The push buttons can be used to activate/deactivate any function, while the inputs provided by the two sensors can be used to control temperature, fans or whatever other function where a temperature or humidity value is needed. It is fully programmable via the SH tool.

Ordering Key

SHA 4 X LS 4 T H

smart-house _____
Housing 44 x 44 mm _____
Standard _____
Light switch _____
Switch number _____
Temperature _____
Humidity _____

Type Selection

Housing	Colour	LEDs	Supply by bus
44 x 44 mm	White/Black*	4 white / 4 blue	SHA4XLS4TH

*Delivered with white and black pushbutton covers

Input Specifications

Temperature Sensor range Accuracy	-40° to + 60°C° (-40° to 140°F) -40° to -20°C (-40° to -4°F), 1°C -20° to +60°C (-4° to 140°F), 0.5°C
Humidity Sensor range Accuracy	5 to 95% RH ± 3%
Keypad	4 push buttons

Dupline® Specifications

Voltage	8.2 V
Maximum Dupline® voltage	10 V
Minimum Dupline® voltage	5.5 V
Maximum Dupline® current	3 mA

Output Specifications

LED	4 white / 4 blue
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Supply Specifications

Power supply	Supplied by bus
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General Specifications

Address assignments	Automatic The controller recognises the module through the SIN (Specific Identification Number) that has to be inserted in the SH tool	Weight	50 g
Environment Degree of protection Pollution degree Operating temperature Storage temperature Humidity (non-condensing)	IP 20 3 (IEC 60664) -40° to +60°C (-40° to 140°F) -40° to +70°C (-40° to 158°F) 5 to 95% RH	Approvals	cULus, according to UL60950 UL notes: Max room temperature: 40°C
Connection Screwless detachable D+ D-	0.2 to 1.5 mm ² Signal GND	CE Marking	Yes
Housing Back part dimensions Back part + front dimensions Back part material Push button covers Accessories	44 x 44 x 25.2 mm 44 x 44 x 28.6 mm Plastic, transparent Plastic white (RAL 9010) Plastic clear white (RAL 9016) Plastic black Transparent plastic ring for Bticino frame	EMC Immunity - Electrostatic discharge - Radiated radiofrequency - Burst immunity - Surge - Conducted radio frequency - Power frequency magnetic fields - Voltage dips, variations, interruptions Emission - Conducted and radiated emissions - Conducted emissions - Radiated emissions	EN 61000-6-2 EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-8 EN 61000-4-11 EN 61000-6-3 CISPR 22 (EN55022), cl. B CISPR 16-2-1 (EN55016-2-1) CISPR 16-2-3 (EN55016-2-3)

Mode of Operation

The SHA4XLS4TH is fully programmable via the SH Tool.

Each push-button, the temperature sensor and the humidity sensor can be individually associated to one or more of the functions supported by the smart-house system.

Addressing

No addressing is needed since the module is provided with a specific identification number (SIN): the user has only to insert the SIN in the SH Tool when creating the system configuration.

Used channels: 4 input channels, 4 output channels

LED programming

Also the LEDs are configurable via SH Tool:

- White LEDs. The 4 white LEDs can be programmed as guide light.
- Blue LEDs: The 4 blue LEDs can be individually programmed as function status indication.

If the Dupline® bus is faulty or missing, the LED will be OFF.

Wall Socket and frame compatible with the Aurora line

The Aurora 44x44 light switch can fit into the frame and wall socket listed below: for any other model not included here below, Carlo Gavazzi does not grant any compatibility.

- Niko
- Fuga
- Bticino: Light, Living, Luna series (the transparent ring has to be used).

The SHA4XLS4TH is compatible with all the 44 x XX Bticino socket just adding a plastic cap by Bticino.