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DATA SHEET

rH- S6

Six-channel transmitter
of the F&Home RADIO system.

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The rH-S6 module has outputs to connect six momentary and potential-free contacts. The module sends information about closing or opening of the contacts to the system. Communication is done via radio. The rH-S6 module is particularly suited for connecting buttons or terminal switches.

The rH-S6 module is represented by an object, which consist of six binary inputs and six binary outputs (bistate), separate for each physical input. Closing or opening of the contact causes a change in logic state of the corresponding output. Red LED lightning on the front plate occurs when the logical state '1' appears on the output, while the logical state '0' turns the LED off.

Inputs		
Figure	Name	Type
	Channel 1, 2, 3, 4, 5, 6	binary

Outputs		
Figure	Name	Type
	Status of contacts 1, 2, 3, 4, 5, 6	binary

Feature name	Description	Range	Unit / Description
Connection monitoring	Sets action in case of loss of connection to the server (information about the modules out of reach).	Standard module	Information on the standard output SX 752
		Alarm module	Information on the alarm output SX 752
		Unmonitored module	No connection correctness control
The delay in signaling a lack of coverage	Sets the delay after which the module is reported that it is beyond the coverage range of the server	1 - 5	
Contact 1, 2, 3, 4, 5, 6 active, when	Defines the status of contacts on the output for which the status is to be set active, which means logical state 1	Closed	Logical state '1' is generated on the output when the contacts are closed.
		Open	Logical state '1' is generated on the output when the contacts are open.
Maximum activity time (0 - unlimited)	Sets the time after which the output status will be changed to logical state '0' in the absence of a response from the module.	0 - 600	second

Contact active when feature: the system adopted positive logic. This means that the idle state is '0', and the active state (unstable) is '1'. For momentary button (bell button) the stable state is an inactive state - at the output of the object we have logical state '0'. Regardless of the selected *Contact active* option and the actual status of contacts, shortly after the project starts the outputs have the logical state '0'. It takes a minute to synchronize with the module and the object outputs are updated. If you choose the *Contact active, when open* option, which means the contact inputs are permanently open, then on the appropriate output of the object will cyclically appear logical state '1' for the time specified in the *Installer Settings*, then the logical state '0' before syncing. If you choose *Contact active, when closed* option and contact inputs are permanently closed, then the appropriate output object will appear cyclically logical state of '1' for the time specified in the *Installer Settings*, then the logical state '0' before syncing. *Maximum activity time* feature: setting the parameter to '0' disables the auto-zeroing of the output. This is usually the case when the contact is treated as a bistable (for example as a limit switch). The maximum activity time has been introduced so that the logic state '1' did not last non-stop, when communication with the module is lost (except in the case where a user himself forced such a situation in *Installer Settings*).

If you connect any element to the binary input of the object, then the signal from this element will be summed up with the signal from physical contact and shared at the corresponding logic output.

The rH-S6 module can be used as an element that reads signals from buttons and controls the actuating relay through program flip-flop module (bistable relay function) for example in lighting systems. In this case, the actuator element is module rH-R5, and the program element is 820 block (D-type flip-flop).

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Technical specifications table	
Rated supply voltage	230 V AC
Supply voltage tolerance	-20%, +10%
Rated power consumption	<1.5 W
Radio link (operation frequency)	868 MHz
Signal strength	9 mW
Transmission type	two-way
Coding	Yes
Range in open space	100 m
Period of logging in the system	30 seconds
Inputs	6 x contact
Contact voltage	10 V
Contact current	5 mA
Control separated from the module power supply	yes
Storing temperature	-20^{O}C to +50^{O}C
Working temperature	0^{O}C, +45^{O}C
Humidity	<=85% (without condensation and aggressive gases)
Dimensions	52.5 x 90 x 65 mm
Ingress protection	IP20
Operating position	any
Enclosure type	on DIN rail
Built-in protection	against overheating

- Disconnect the power supply circuit; make sure using the appropriate device if there is no voltage on the supply lines.
- Mount the module on DIN rail in the switchboard.
- Connect the wires according to the diagram above.
- Do not apply voltage on the control inputs!
- Place the antenna of the module parallel to one of the antennas of the server and move it away as far as possible from other wires.
- Register the module in the system.

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Module operation indication (green LED)	
Mode	Description
Online (registered)	LED lights, dims during radio transmission
Registration	LED pulsating quickly
Offline	LED flashes every half a second - a module has lost the radio connection to the server or is not registered
Not programmed	LED flashes: lights, dims for 100 ms every 1 second - the module should be returned to the

Registration in the system

1. Select the registration method in the configurator.
2. Press and hold the button on the housing.
3. After 5 seconds the module will register itself in the system or the program will report an error in case of failure.

WARNING

The connection method is specified in this manual. Any activities related to installation, connection and regulation should be carried out by persons with electrical qualifications who are familiar with this manual and features of the module. Manner of transport, storing and using the module affects its proper operation. Installation of the module is not recommended in the following cases: missing components, damage to the module or its deformation. In case of malfunction the module should be returned to the manufacturer.