### Technical data

- **Supply voltage:** 9-30V DC ±10%
- **Input:** 2 potential-free inputs, 1 digital input 1 wire
- **Output:** 2 potential-free outputs
- **Maximum current carrying capacity of outputs:** 150mA
- **Maximum voltage at output contacts:** 30V DC / 44V AC ±3%
- **Operating temperature:** 0 - 40 °C
- **Number of servicing contacts:** 4
- **Measurement range:** -50°C – +120°C
- **Operating temperature:** 930 - 40 °C
- **Power protocol:** Z-Wave
- **Power frequency:** 868.4 MHz for EU
- **Max Power for US:** 315.4 MHz for US, 121.4 MHz for AS/NZES868
- **Range:** up to 30m in buildings (depending on the construction materials) up to 50m in the field
- **Dimensions (height x width x depth):** 14.3 x 27.5 x 11.2 mm
- **Weight:** 25g

### II. Sensor Installation

1. Before the installation make sure to switch off the alarm system or any other system to which the device is to be connected.
2. Connect the Fibaro Sensor according to the diagram.
3. Place the Fibaro Sensor in the sensor housing.
4. Arrange the antenna (instructions can be found below the diagrams).

#### EXPLANATION OF CONDUCTOR MARKINGS:

- **P** – POWER – power supply conductor
- **GND** – ground conductor
- **OUT1** – output no. 1 assigned to input IN1
- **OUT2** – output no. 2 assigned to input IN2
- **IN1** – input no. 1 assigned to input IN1
- **IN2** – input no. 2 assigned to input IN2
- **COM** – common conductor for the DS18B20 temperature sensor, while ANT – antenna, black
- **TP** – (TEMP_POWER) – power supply conductor of the DS18B20 temperature sensor, white
- **TP** – (TEMP_POWER) – power supply conductor of the DS18B20 temperature sensor, brown (3.3V)
- **TP** – (TEMP_POWER) – power supply conductor of the DS18B20 temperature sensor, red
- **IN2** – output no. 2 assigned to input IN2
- **B** – maintenance button (used to add devices to and remove devices from the system)
- **NO** – normal open
- **NC** – normal close
- **COM** – common
- **GND** – ground

#### ANTENNA ARRANGEMENT INSTRUCTIONS:

1. Lay down the antenna as far as possible from other wires and metal elements (connection conductors, ring metal elements) up to 50m in the field.
2. The antenna is placed so that it faces the direction of the signal.
3. Metal surfaces in close vicinity (e.g. metal winched loosely, metal door frame) may impair the reception capability.

#### DANGER

The Sensor is powered with reserve voltage, nevertheless, the user should be extra careful or connection the installation is a qualified person.

### III. Fibaro Sensor start-up

1. **Installation of the Universal Binary Sensor Module**

   **STEP 1** Connect the device according to the electrical diagram shown in Figure 1. Engage the supply voltage.

   **STEP 2** The Fibaro Module must be in range of the Home Center 2 controller, because the procedure of inclusion to the Fibaro system requires direct communication with the controller.

   **STEP 3** Recognition of B button, which allows for proper inclusion of device.

   **STEP 4** Setting the Home Center 2 controller to the inclusion or exclusion mode (see Home Center 2 controller instructions).

   **STEP 5** The Fibaro Sensor is added to the network by quickly pressing the B button three times (the button is located in the center of the device).

### INSTRUCTIONS FOR ARRANGEMENT OF THE DS18B20 SENSOR:

- **The DS18B20 sensor may easily be installed whenever very precise temperature measurements are required. However, if proper protective measures are undertaken, the sensor may be used in humid environments or under water, it may be embedded in protective measures are undertaken, the sensor may be used in humid environments or under water, it may be embedded in protective measures are undertaken, the sensor may be used in humid environments or under water, it may be embedded in protective measures are undertaken, the sensor may be used in humid environments or under water, it may be embedded in protective measures are undertaken, the sensor may be used in humid environments or under water, it may be embedded in protective measures are undertaken, the sensor may be used in humid environments or under water, it may be embedded in protective measures are undertaken, the sensor may be used in humid environments or under water, it may be embedded in protective measures are undertaken, the sensor may be used in humid environments or under water, it may be embedded in protective measures are 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Device configuration

Parameter no. 1

1. Input + alarm cancellation delay. Additional delay after an alarm from input INT I has ceased. This parameter allows you to specify additional time, after which the input +1 is activated once its cancelation has been ceased.

Default value: 0

Parameter no. 2

1. Input alarm cancellation delay. Additional delay after an alarm from input INT I has ceased. The parameter allows you to specify additional time, after which the input +1 is activated once its cancelation has been ceased.

Default value: 0

Parameter no. 3

Type of inputs

- INPUT NC (Normal Close)
- INPUT NO (Normal Open)
- INPUT MONOSTABLE
- INPUT BISTABLE

Parameter no. 4

Type of input:

- INPUT NC (Normal Close)
- INPUT NO (Normal Open)
- INPUT MONOSTABLE
- INPUT BISTABLE

Parameter no. 5

Parameter settings of the function for association group 1, activated via input INT I. The parameter allows you to specify the type of alarm frame to be transmitted over control commands (BASIC_SET).

Default value: 255 – BASIC_SET

Possible parameter settings:
- 0 – FRAME Tổng GHI
- 1 – FRAME ALARM GENERIC
- 2 – FRAME ALARM SMOKE
- 3 – FRAME ALARM GAS
- 4 – FRAME ALARM HEAT
- 5 – FRAME ALARM WATER
- 205 – control frame BASIC_SET

Parameter no. 6

Type of timer control frame for association group 1, activated via input INT I. The parameter allows you to specify the type of alarm frame to be transmitted over control commands (BASIC_SET).

Default value: 255 – BASIC_SET

Possible parameter settings:
- 0 – FRAME Tổng GHI
- 1 – FRAME ALARM GENERIC
- 2 – FRAME ALARM SMOKE
- 3 – FRAME ALARM GAS
- 4 – FRAME ALARM HEAT
- 5 – FRAME ALARM WATER
- 205 – control frame BASIC_SET

Parameter no. 7

Value of the parameter specifying the forced level of dimming: opening sun blinds when certain "on" switch is not opened (command is received from the controller) in the case of alarm frame the alarm priority is specified. Default value: 255

Possible parameter settings:
- (1 – 255)
- 255

Value of 255 makes it possible to activate the device using the Donner module in a way identifying the device and setting a certain level of dimming, which, after being deactivated, and then activated with command 255, it will automatically set to the previous condition, i.e. 0.

Parameter no. 8

Value of the parameter specifying the forced level of dimming: opening sun blinds when command "on" switch is not opened (command is received from the controller) in the case of alarm frame the alarm priority is specified. Default value: 0

Possible parameter settings:
- 1 – 255
- 255

Parameter no. 9

Function of the frame controlling the alarm on the frame controlling device (device basic) that allows for disabling the alarm function or the alarm frame function for devices associated with the appropriate input of the Fibaro Sensor. Default value: 0, in case of association group 1, no 1 and 2 is informed

Possible parameter settings:
- 0 – in the case of association group 1, no 1 and 2 is informed
- 1 – in the case of association group 1, no 1, no 2 is informed
- 2 – in the case of association group 1, no 1 is informed
- 3 – the information is not sent, in the case of association group 2, no 1, no 2 is informed

Parameter no. 10

Interval between successive readings of temperature from all sensors connected to the device. Default value: 120S

Possible parameter settings:
- 1 – 20S
- 2 – 40S
- 3 – 60S
- 4 – 120S
- 5 – 240S
- 6 – 3600S
- 7 – 5400S

Note: Taking temperature readings from the sensor does not result in sending a temperature condition report to the central hub.

Parameter no. 11

Interval between forcing to send report concerning the temperature condition. The forced report is sent immediately after reaching the current level of reading of temperature from the sensor, irrespective of the settings of parameter 10. Default value: 1S

Possible parameter settings:
- 1 – 20S
- 2 – 40S
- 3 – 60S
- 4 – 120S
- 5 – 240S

Parameter no. 12

Indifference to temperature changes. This is the maximum acceptable difference between the last reported temperature and the current temperature taken from the sensor. If the difference is greater than the value of the parameter or, more, then a report with the current temperature is sent to the device assigned to association group 1, no 1, no 2 is informed, taking readings from sensors and Default value: 8 (0.5°C)

Possible parameter settings:
- 255 – frame or to force transmission of control commands (BASIC_SET)
- 1 – activation of functionality
- 0 – deactivation of functionality

Possible parameter settings:
- delta 1 – maximum acceptable gradient Celsius or Fahrenheit
- delta 2 – maximum acceptable gradient Celsius or Fahrenheit

Parameter no. 13

Scene ID is assigned in the following manner:

- triple click ID 12
- double click ID 14
- holding down ID 16
- remaining IDs are recognized correctly if the value of parameter no. 4 was set to 2
- remaining IDs are recognized correctly if the value of parameter no. 4 was set to 3
- remaining IDs are recognized correctly if the value of parameter no. 4 was set to 4
- remaining IDs are recognized correctly if the value of parameter no. 4 was set to 5
- remaining IDs are recognized correctly if the value of parameter no. 4 was set to 6
- remaining IDs are recognized correctly if the value of parameter no. 4 was set to 7
- remaining IDs are recognized correctly if the value of parameter no. 4 was set to 8
- remaining IDs are recognized correctly if the value of parameter no. 4 was set to 9

Parameter no. 14

Scene activation functionality. Default value: 0

Possible parameter settings:
- 1 – activation of functionality
- 0 – deactivating the function

The device offers the possibility of sending commands with a function of scene activation. Information sent in this mode is not repeated by the network element.

Parameter no. 15

Alarm sending functionality. Default value: 0

Possible parameter settings:
- 1 – in the case of associated alarm sensor alarm
- 0 – the alarm sensor alarm

The devices are activated to send information on "singlecast" mode to devices assigned to the association group whose channel is deactivated.

Parameter no. 16

Internal function of activity. Default value: 0

Possible parameter settings:
- 1 – activity of functionality
- 0 – deactivating the function

The device offers the possibility of sending commands with a function of scene activation. Information sent in this mode is not repeated by the network element.

Parameter no. 17

Scene activation functionality. Default value: 0

Possible parameter settings:
- 1 – activation of functionality
- 0 – deactivating the function

The device offers the possibility of sending commands with a function of scene activation. Information sent in this mode is not repeated by the network element.

Parameter no. 18

Scene activation functionality. Default value: 0

Possible parameter settings:
- 1 – activation of functionality
- 0 – deactivating the function

The device offers the possibility of sending commands with a function of scene activation. Information sent in this mode is not repeated by the network element.

Parameter no. 19

Scene activation functionality. Default value: 0

Possible parameter settings:
- 1 – activation of functionality
- 0 – deactivating the function

The device offers the possibility of sending commands with a function of scene activation. Information sent in this mode is not repeated by the network element.

Parameter no. 20

Scene activation functionality. Default value: 0

Possible parameter settings:
- 1 – activation of functionality
- 0 – deactivating the function

The device offers the possibility of sending commands with a function of scene activation. Information sent in this mode is not repeated by the network element.

Parameter no. 21

Scene activation functionality. Default value: 0

Possible parameter settings:
- 1 – activation of functionality
- 0 – deactivating the function

The device offers the possibility of sending commands with a function of scene activation. Information sent in this mode is not repeated by the network element.

Parameter no. 22

Scene activation functionality. Default value: 0

Possible parameter settings:
- 1 – activation of functionality
- 0 – deactivating the function

The device offers the possibility of sending commands with a function of scene activation. Information sent in this mode is not repeated by the network element.

Parameter no. 23

Scene activation functionality. Default value: 0

Possible parameter settings:
- 1 – activation of functionality
- 0 – deactivating the function

The device offers the possibility of sending commands with a function of scene activation. Information sent in this mode is not repeated by the network element.