

Wireless room humidity and temperature radio sensors with solar cell

The room temperature sensors **KYMASGARD® RTF 2 - FSE** or **RFTF 2 - FSE** are batteryless and maintenance-free radio transmitters. Energy generation is effected by conversion of indoor room light into electric energy by means of a solar generator. These sensors are used to detect the room temperature or room humidity and to transmit the measurands via radio frequency to radio actuators and radio signal receivers / gateways. If ambient light conditions are insufficient for energy generation, they also can be operated on a lithium battery. To do so, insert the lithium cell into the battery holder provided.

The device IDs are marked on a label in the device.

TECHNICAL DATA

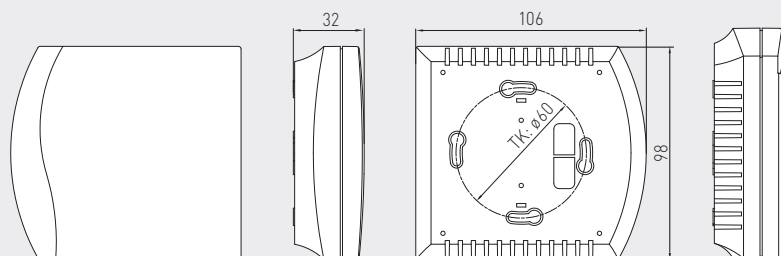
Operation:	Energy generation by solar cell, batteryless, maintenance-free (optionally battery-operated)
Radio technology:	EnOcean protocol, modulation ASK, 868 MHz, transmission power max. 10 mW, telegram type 4BS
Channels:	1 temperature, 1 humidity
Radio transmitter module:	EnOcean Dolphin
Measuring range, temperature:	0...+40 °C
Deviation, temperature:	typically ±0.2 K at +25 °C
Measuring range, humidity:	0...100 % RH
Deviation humidity:	typically ±3 % RH (30...80%) at +20 °C
Measurand acquisition:	adjustable, every 1s / 10 s / 100 s
Transmission interval:	adjustable, typically every 100 seconds, or at any measuring value change, status telegram approximately every 16 minutes
Range of coverage:	indoors typically 30 - 100 m, outdoors up to 300 m
Housing:	plastic, material ABS, colour pure white (similar to RAL 9010)
Dimensions:	98 x 106 x 32 mm (Frija 2)
Mounting:	wall mounting or on in-wall flush box Ø 55 mm, base with 4-hole for mounting on vertically or horizontally installed in-wall flush boxes
Ambient temperature:	-5...+55 °C
Storage temperature:	-25...+60 °C
Humidity:	0...90 % RH, non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	IP 30 (according to EN 60 529)
Standards:	CE conformity according to EMC directive 2014 / 30 / EU and according to R&TTE directive 2014 / 53 / EU



RTF 2 - FSE
RFTF 2 - FSE

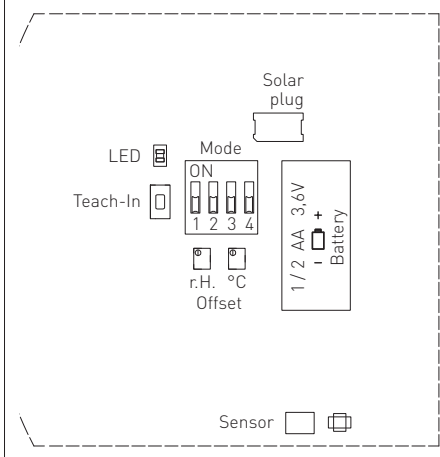
Dimensional drawing

RTF 2 - FSE
RFTF 2 - FSE



Schematic diagram

RTF 2 - FSE
RFTF 2 - FSE



KYMASGARD® RTF 2 - FSE KYMASGARD® RFTF 2 - FSE

Room temperature radio sensors
Wireless room humidity and temperature radio sensors

Type / WG02	Channels	Measuring Range Temperature Humidity	Energy Generation	Item No.	Price
RTF2-FSE	1	0...+40 °C –	Solar cell, battery	1801-4451-0040-040	137,50 €
RFTF2-FSE	2	0...+40 °C 0...100 % RH	Solar cell, battery	1801-4452-3040-040	318,26 €
ACCESSORIES					
ET BATTERIE	Lithium battery LS 14250			7000-4000-5000-000	19,74 €
Compatibility	For an overview, see the start of the chapter				



S+S REGELTECHNIK

KYMASGARD® RTF 2 - FSE - P
KYMASGARD® RFTF 2 - FSE - P

Wireless room humidity and temperature radio sensors
with solar cell and setpoint setter

The room temperature sensor **KYMASGARD® RTF 2 - FSE - P** or **RFTF 2 - FSE - P** is a batteryless and maintenance-free radio transmitter. Energy generation is effected by conversion of indoor room light into electric energy by means of a solar generator. These sensors are used to detect the room temperature or room humidity as well as for setpoint setting and to transmit the measurands via radio frequency to radio actuators and radio signal receivers / gateways. If ambient light conditions are insufficient for energy generation, they also can be operated on a lithium battery. To do so, insert the lithium cell into the battery holder provided. The device IDs are marked on a label in the device.

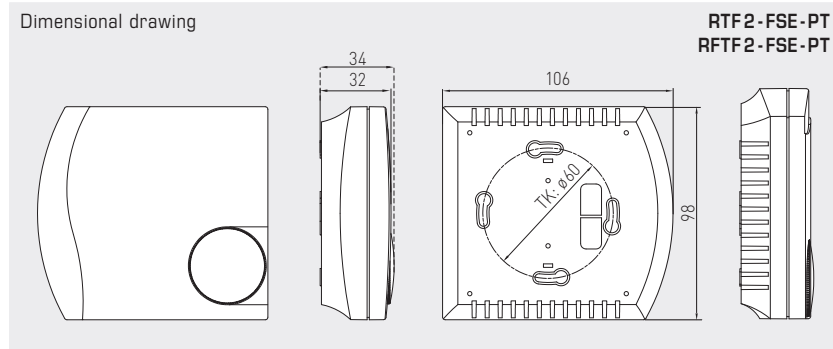
RTF 2 - FSE - P
RFTF 2 - FSE - P



TECHNICAL DATA

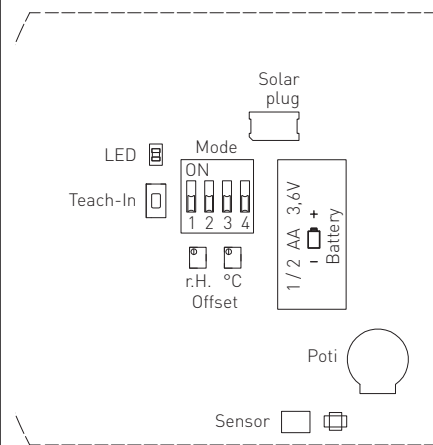
Operation:	Energy generation by solar cell, batteryless, maintenance-free (optionally battery-operated)
Radio technology:	EnOcean protocol, modulation ASK, 868 MHz, transmission power max. 10 mW, telegram type 4BS
Channels:	1 temperature, 1 humidity, 1 setpoint
Radio transmitter module:	EnOcean Dolphin
Measuring range, temperature:	0...+40 °C
Deviation, temperature:	typically ±0.2 K at +25 °C
Measuring range, humidity:	0...100 % RH
Deviation humidity:	typically ±3 % RH (30...80%) at +20 °C
Setpoint capture:	turning angle left 0° = 0 bits turning angle right 220° = 255 bits
Measurand acquisition:	adjustable, every 1s / 10s / 100s
Transmission interval:	adjustable, typically every 100 seconds, or at any measuring value change, or change of turning angle status telegram approximately every 16 minutes
Range of coverage:	indoors typically 30 - 100 m, outdoors up to 300 m
Housing:	plastic, material ABS, colour pure white (similar to RAL 9010)
Dimensions:	98 x 106 x 34 mm (Frija2)
Mounting:	wall mounting or on in-wall flush box Ø 55 mm, base with 4-hole for mounting on vertically or horizontally installed in-wall flush boxes
Ambient temperature:	-5...+55 °C
Storage temperature:	-25...+60 °C
Humidity:	0...90 % RH, non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	IP 30 (according to EN 60 529)
Standards:	CE conformity according to EMC directive 2014 / 30 / EU and according to R&TTE directive 2014 / 53 / EU

Dimensional drawing



Schematic diagram

RTF 2 - FSE - P
RFTF 2 - FSE - P



KYMASGARD® RTF 2 - FSE - P
KYMASGARD® RFTF 2 - FSE - P

Room temperature radio sensors
Wireless room humidity and temperature radio sensors

Type / WG02	Channels	Measuring Range Temperature Humidity	Energy Generation	Item No.	Price
RTF2-FSE-P	2	0...+40 °C –	Solar cell, battery	1801-4451-0140-040	161,69 €
RFTF2-FSE-P	3	0...+40 °C 0...100 % RH	Solar cell, battery	1801-4452-0140-040	337,33 €
ACCESSORIES					
ET BATTERIE	Lithium battery LS 14250			7000-4000-5000-000	19,74 €
BG KNOPF	Control knob (4°C...34°C) for combination with TA2-FEM			7000-4030-0008-058	5,99 €
Compatibility	For an overview, see the start of the chapter				

**Wireless room humidity and temperature radio sensors
with solar cell, setpoint setter, and push-button**

The room temperature sensor **KYMASGARD® RTF 2 - FSE - PT** or **RFTF 2 - FSE - PT** is a batteryless and maintenance-free radio transmitter. Energy generation is effected by conversion of indoor room light into electric energy by means of a solar generator. These sensors are used to detect the room temperature or room humidity as well as for setpoint setting and to transmit the measurands via radio frequency to radio actuators and radio signal receivers / gateways. If ambient light conditions are insufficient for energy generation, they also can be operated on a lithium battery. To do so, insert the lithium cell into the battery holder provided. The device IDs are marked on a label in the device.

**RTF 2 - FSE - PT
RFTF 2 - FSE - PT**

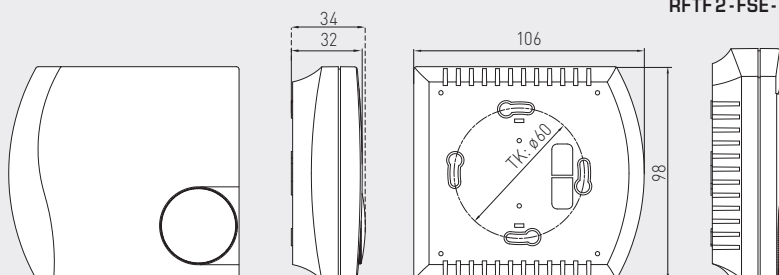


TECHNICAL DATA

Operation:	Energy generation by solar cell, batteryless, maintenance-free (optionally battery-operated)
Radio technology:	EnOcean protocol, modulation ASK, 868 MHz, transmission power max. 10 mW, telegram type 4BS
Channels:	1 temperature, 1 humidity, 1 setpoint, 1 presence pushbutton
Radio transmitter module:	EnOcean Dolphin
Measuring range, temperature:	0...+40 °C
Deviation, temperature:	typically ±0.2 K at +25 °C
Measuring range, humidity:	0...100 % RH
Deviation humidity:	typically ±3 % RH (30...80 %) at +20 °C
Setpoint capture:	turning angle left 0° = 0 bits turning angle right 220° = 255 bits
Measurand acquisition:	adjustable, every 1s / 10 s / 100 s
Transmission interval:	adjustable, typically every 100 seconds, or at any measuring value change, or change of turning angle status telegram approximately every 16 minutes
Range of coverage:	indoors typically 30 - 100 m, outdoors up to 300 m
Housing:	plastic, material ABS, colour pure white (similar to RAL 9010)
Dimensions:	98 x 106 x 34 mm (Frija 2)
Mounting:	wall mounting or on in-wall flush box Ø 55 mm, base with 4-hole for mounting on vertically or horizontally installed in-wall flush boxes
Ambient temperature:	-5...+55 °C
Storage temperature:	-25...+60 °C
Humidity:	0...90 % RH, non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	IP 30 (according to EN 60 529)
Standards:	CE conformity according to EMC directive 2014 / 30 / EU and according to R&TTE directive 2014 / 53 / EU

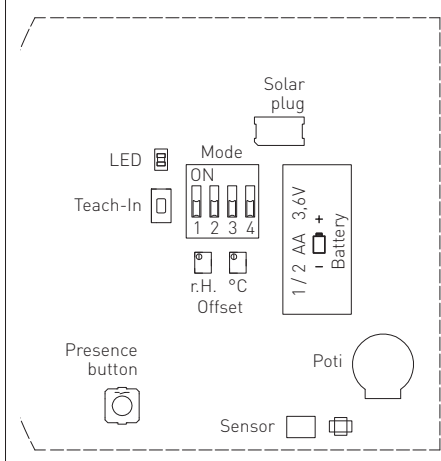
Dimensional drawing

**RTF 2 - FSE - PT
RFTF 2 - FSE - PT**



Schematic diagram

**RTF 2 - FSE - PT
RFTF 2 - FSE - PT**



**KYMASGARD® RTF 2 - FSE - PT
KYMASGARD® RFTF 2 - FSE - PT**

Room temperature radio sensors
Wireless room humidity and temperature radio sensors

Type / WG02	Channels	Measuring Range Temperature Humidity	Energy Generation	Item No.	Price
RTF2-FSE-PT	3	0...+40 °C –	Solar cell, battery	1801-4451-0440-040	171,85 €
RFTF2-FSE-PT	4	0...+40 °C 0...100 % RH	Solar cell, battery	1801-4452-0440-040	347,54 €
ACCESSORIES					
ET BATTERIE	Lithium battery LS 14250			7000-4000-5000-000	19,74 €
Compatibility	For an overview, see the start of the chapter				



S+S REGELTECHNIK

KYMASGARD® RTF 2 - FSE - PD
KYMASGARD® RFTF 2 - FSE - PD

Wireless room humidity and temperature radio sensors
with solar cell, setpoint setter, and step selection

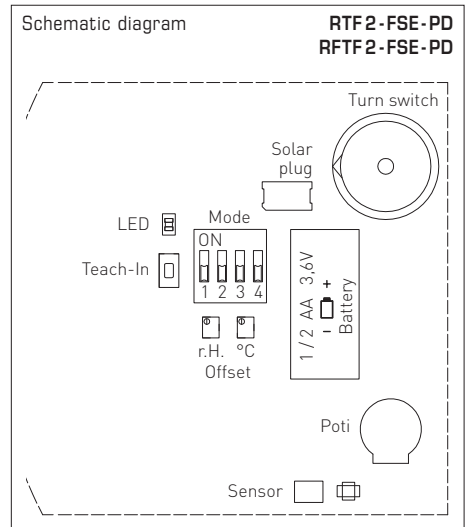
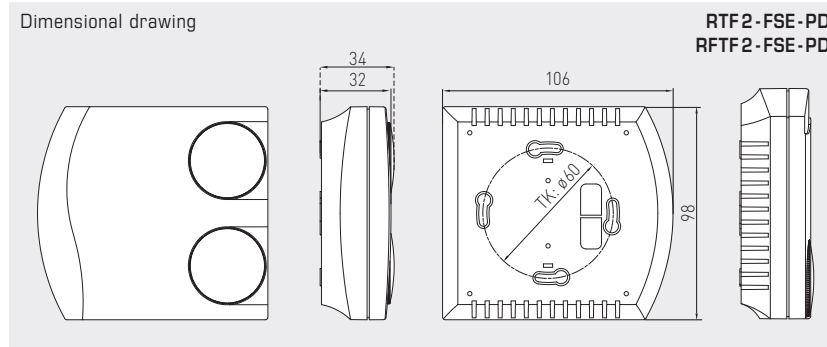
The room temperature sensor **KYMASGARD® RTF 2 - FSE - PD** or **RFTF 2 - FSE - PD** is a batteryless and maintenance-free radio transmitter. Energy generation is effected by conversion of indoor room light into electric energy by means of a solar generator. These sensors are used to detect the room temperature or room humidity as well as for setpoint setting and to transmit the measurands via radio frequency to radio actuators and radio signal receivers / gateways. If ambient light conditions are insufficient for energy generation, they also can be operated on a lithium battery. To do so, insert the lithium cell into the battery holder provided. The device IDs are marked on a label in the device.

RTF 2 - FSE - PD
RFTF 2 - FSE - PD



TECHNICAL DATA	
Operation:	Energy generation by solar cell, batteryless, maintenance-free (optionally battery-operated)
Radio technology:	EnOcean protocol, modulation ASK, 868 MHz, transmission power max. 10 mW, telegram type 4BS
Channels:	1 temperature, 1 setpoint, 1 step switch
Radio transmitter module:	EnOcean Dolphin
Measuring range, temperature:	0...+40 °C
Deviation, temperature:	typically ± 0.2 K at +25 °C
Measuring range, humidity:	0...100 % RH
Deviation humidity:	typically ± 3 % RH (30... 80%) at +20 °C
Setpoint capture:	turning angle left 0° = 0 bits turning angle right 220° = 255 bits Step selection: 0 to 255 bits in steps
Measurand acquisition:	adjustable, every 1s / 10s / 100s
Transmission interval:	adjustable, typically every 100 seconds, or at any measuring value change, or change of turning angle status telegram approximately every 16 minutes
Range of coverage:	indoors typically 30 - 100 m, outdoors up to 300 m
Housing:	plastic, material ABS, colour pure white (similar to RAL 9010)
Dimensions:	98 x 106 x 34 mm (Frija2)
Mounting:	wall mounting or on in-wall flush box Ø 55 mm, base with 4-hole for mounting on vertically or horizontally installed in-wall flush boxes
Ambient temperature:	-5...+55 °C
Storage temperature:	-25...+60 °C
Humidity:	0...90 % RH, non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	IP 30 (according to EN 60 529)
Standards:	CE conformity according to EMC directive 2014 / 30 / EU and according to R&TTE directive 2014 / 53 / EU

Dimensional drawing



KYMASGARD® RTF 2 - FSE - PD
KYMASGARD® RFTF 2 - FSE - PD

Room temperature radio sensors
Wireless room humidity and temperature radio sensors

Type / WG02	Channels	Measuring Range Temperature Humidity	Energy Generation	Item No.	Price
RTF2-FSE-PD2	3	0...+40 °C –	Solar cell, battery	1801-4451-0240-040	193,49 €
RTF2-FSE-PD5	3	0...+40 °C –	Solar cell, battery	1801-4451-0340-040	193,49 €
RFTF2-FSE-PD2	4	0...+40 °C 0...100% RH	Solar cell, battery	1801-4452-0240-040	362,82 €
ACCESSORIES					
ET BATTERIE	Lithium battery LS 14250			7000-4000-5000-000	19,74 €
Compatibility	For an overview, see the start of the chapter				

**Wireless room temperature radio sensors
with solar cell, setpoint setter, step selection, and push-button**

The room temperature sensor **KYMASGARD® RTF 2 - FSE - PDT** is a battery-less and maintenance-free radio transmitter. Energy generation is effected by conversion of indoor room light into electric energy by means of a solar generator. These sensors are used to detect the room temperature as well as for setpoint setting and to transmit the measurands via radio frequency to radio actuators and radio signal receivers / gateways. If ambient light conditions are insufficient for energy generation, they also can be operated on a lithium battery. To do so, insert the lithium cell into the battery holder provided. The device IDs are marked on a label in the device.

RTF2-FSE-PDT

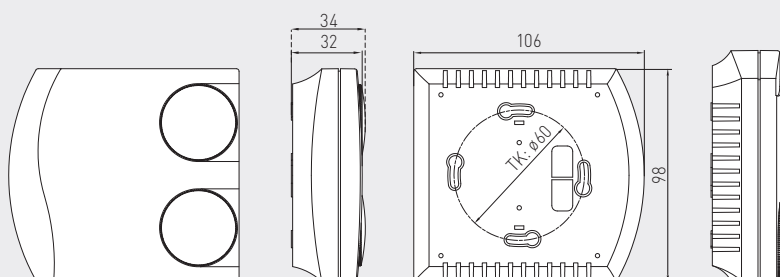


TECHNICAL DATA

Operation:	Energy generation by solar cell, batteryless, maintenance-free (optionally battery-operated)
Radio technology:	EnOcean protocol, modulation ASK, 868 MHz, transmission power max. 10 mW, telegram type 4BS
Channels:	1 temperature, 1 setpoint, 1 step switch, 1 presence pushbutton
Radio transmitter module:	EnOcean Dolphin
Measuring range, temperature:	0...+40 °C
Deviation, temperature:	typically ±0.2 K at +25 °C
Setpoint capture:	turning angle left 0° = 0 bits turning angle right 220° = 255 bits Step selection: 0 to 255 bits in steps
Measurand acquisition:	adjustable, every 1s / 10 s / 100 s
Transmission interval:	adjustable, typically every 100 seconds, or at any measuring value change, presence push-button activation, or change of turning angle status telegram approximately every 16 minutes
Range of coverage:	indoors typically 30 - 100 m, outdoors up to 300 m
Housing:	plastic, material ABS, colour pure white (similar to RAL 9010)
Dimensions:	98 x 106 x 34 mm (Frija 2)
Mounting:	wall mounting or on in-wall flush box Ø 55 mm, base with 4-hole for mounting on vertically or horizontally installed in-wall flush boxes
Ambient temperature:	-5...+55 °C
Storage temperature:	-25...+60 °C
Humidity:	0...90 % RH, non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	IP 30 (according to EN 60 529)
Standards:	CE conformity according to EMC directive 2014 / 30 / EU and according to R&TTE directive 2014 / 53 / EU

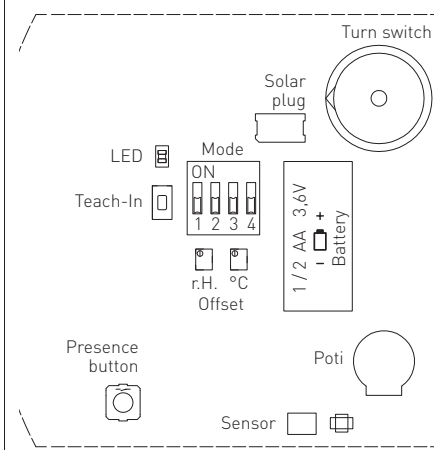
Dimensional drawing

RTF2-FSE-PDT



Schematic diagram

RTF2-FSE-PDT



KYMASGARD® RTF 2 - FSE - PDT Room temperature radio sensor

Type / WG02	Channels	Measuring Range Temperature Humidity	Energy Generation	Item No.	Price
RTF2-FSE-PD5T	4	0...+40 °C -	Solar cell, battery	1801-4451-0540-040	206,24 €
ACCESSORIES					
ET BATTERIE	Lithium battery LS 14250			7000-4000-5000-000	19,74 €
Compatibility	For an overview, see the start of the chapter				



S+S REGELTECHNIK

