KYMASGARD® RFTM-xx-FSE

**Multi-functional room radio sensors / room control units with solar cell
for temperature, humidity, air quality (VOC) and motion / presence**

Radio bus system KYMASGARD® 9000

S+S REGELTECHNIK

The room radio sensors of the radio bus system **KYM**ASGARD® **9000** are maintenance-free radio transmitters that operate without batteries (except for **RFTM-LQ-FSE**). Energy generation is effected by conversion of indoor room light into electric energy by means of a solar generator. If the ambient light is too low for power generation, the sensors can optionally be powered by two AAA batteries (not included). These sensors are used to detect the indoor climate and the setpoint values, and to transmit the recorded values to radio actuators and radio signal receivers / gateways via radio signals. The following device configurations are available:

The room sensor **KYM**ASGARD® **RFTM-FSE** is used to measure room temperature and room humidity.

The room control unit **KYM**ASGARD® **RFTM-FSE-ST** is used to measure room temperature and humidity, and to display and set the setpoint for temperature.
The setpoint is set directly on site using touch buttons.

The room sensor **KYM**ASGARD® **RFTM-LQ-FSE** is used to measure room temperature, room humidity and air quality (VOC = Volatile Organic Compounds).

The room sensor **KYM**ASGARD® **RFTM-BW-FSE** is used to measure room temperature, room humidity and the movement (or presence) of persons.

Optional accessories include the wall holder **WH-3100** and the stand holder **SH-3110**, which enable them to be used as table-top units.

Room devices
(Ø 90 mm)
with stand holder
(optional)

TECHNICAL DATA

Operation:	Power generated by solar cell, battery-free, (except for **RFTM-LQ-FSE**) maintenance-free (battery operation optional)
Radio technology:	EnOcean protocol, modulation ASK, 868 MHz, transmission power max. 10 mW, telegram type 4BS
Channels:	1 temperature, 1 humidity, 1 setpoint, 1 air quality (VOC), 1 motion/presence
Radio transmitter module:	EnOcean Dolphin
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:	Ø 88 mm, height 18 mm
Mounting:	Wall-mounted or free-standing using accessories
Ambient temperature:	−5...+55 °C
Storage temperature:	−25...+60 °C
Permitted 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

HUMIDITY

Operating range, humidity:	0...100 % RH
Deviation in humidity:	typically **± 2.0** % (20...80 % RH) at +25 °C, otherwise ± 3.0 %

TEMPERATURE

Operating range, temperature:	0...+40 °C
Deviation in temperature:	typically ± 0.2 K at +25 °C

AIR QUALITY (VOC)

VOC measuring range:	0...8000 ppb (Rotary switch position 0,1); with reference to calibration gas
VOC measuring accuracy:	± 20 % final value (with reference to the calibration gas)

MOTION

Detection:	yes/no (motion + presence)

SETPOINT / DISPLAY

Operating elements:	The setpoint for temperature can be set and displayed on a touch panel.

SH-3110
Stand holder
(optional)

WH-3100
Wall holder
(optional)

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S+S REGELTECHNIK

RFTM-FSE-ST	RFTM-FSE RFTM-LQ-FSE	RFTM-BW-FSE
Room control unit	Room radio sensors	Room radio sensors

KYMASGARD® **RFTM-FSE**	Room radio sensor / room control unit for temperature and humidity
KYMASGARD® **RFTM-LQ-FSE**	Room radio sensor for temperature, humidity and air quality (VOC)
KYMASGARD® **RFTM-BW-FSE**	Room radio sensor for temperature, humidity and motion / presence detection

Type / WG02	Channels	Measuring ranges / detection		VOC	Movement	Set point	EnOcean-Profile	Item no.	Price
		Temperature	Humidity						
RFTM-FSE									
RFTM-FSE	2	0...+40 °C	0...100 % RH	–	–	–	**EEP A5-04-01**	1801-4280-0000-000	**273,04 €**
RFTM-FSE ST	3	0...+40 °C	0...100 % RH	–	–	●	**EEP A5-10-12**	1801-4280-0869-000	**307,32 €**
RFTM-LQ-FSE									
RFTM-LQ-FSE	4	0...+40 °C	0...100 % RH	0...8000 ppb	–	–		1801-4280-3000-000	**378,80 €**
RFTM-BW-FSE									
RFTM-BW-FSE	3	0...+40 °C	0...100 % RH	–	yes / no	–		1801-4280-4000-000	**365,53 €**
Equipment:		The **setpoint** for temperature can be set via the operating and display elements.							

ACCESSORIES				
SH-3110	Stand holder for room radio units (Ø 90 mm)		1801-8490-2000-000	**30,82 €**
WH-3100	Wall holder for room radio units (Ø 90 mm and Ø 130 mm)		1801-8490-1000-000	**8,91 €**
Compatibility	For an overview, see the start of the chapter			