



Qmodule 5.5 heat

Add-on radio module

Add-on radio module for retrofi tting compact heat meters of the Qheat5 series as well as calculator units of the R 20 / 21 series for use in the Qwalk-by and Q AMR systems. The add-on module takes over the data from heat meters and calculator units and transmits these to a readout system. The add-on module is equipped with an optical interface for parameter setting.



Application

The add-on radio modules Qmodule 5.5 heat are part of the Q AMR and Qwalk-by systems. They are used when heat meters of the Qheat 5 series and calculator units of the R 20 / 21 series are available and their data are to be recorded within one of these systems.

Features

- > transmission of the consumption data and due date values by radio
 -) heat measurement data from the heat meter or calculator unit
 -) cooling energy metering in the case of combined heat and cold metering
-) optionally available with AES-128 encrypted data transmission according to OMS-Encryption Mode 5
- readout of the heat meters takes place via an optical interface
-) add-on radio module does not have its own display



In Q AMR (C-mode) the radio module Qmodule 5.5 heat transmits OMS® radio telegrams (OMS® - Open Metering System) parallel to the walk-by telegrams. The radio telegrams meet the Open Metering System Specification and can thus be received by all OMS®-compatible devices.

S-Mode

- radio system parallel transmission of Qwalk-by and Q AMR data telegrams
-) increased radio performance
- transmission delay (offset) time delay for sending telegrams after the due date or at the beginning of the month in days (standard = 0 days)
- transmission-free day a maximum of 2 days from Friday, Saturday and Sunday can be defined as transmission-free days At least 1 day must be set (standard = Sunday).
-) switching from S-Mode to C-Mode possible in both directions

Qwalk-by	Q AMR
every 128 seconds	every 4 hours
10 hours per day (8 am 6 pm)	24 hours per day
monthly: 4 readout days from the first of each month	7 days per week
annually: 48 hours after due date	365 days per year
transmitted data:	transmitted data:
current consumption value with date	current consumption value with date
) last month's value with date and values from previous	last month's value with date
12 months	due date value with date
due date value with date	device status: error code and error date



C-Mode

-) radio system parallel transmission of Qwalk-by and OMS-compliant data telegrams
-) increased radio capacity

Qwalk-by	Q AMR
every 112 seconds	every 450 seconds (7.5 minutes)
10 hours per day (8 am 6 pm)	24 Stunden pro Tag
365 days per year	365 days per year
transmitted data:	transmitted data:
current consumption value with date	current consumption value with date
) last month's value with date and values from previous) last month's value with date
12 months) due date value with date
) due date value with date) device status: error code and error date
device status: error code and error date	

Type overview

System	Article number
S-Mode (Q AMR, Qwalk-by)	RHM5 00AN 0000 Zxxx x
C-Mode (Q AMR, Qwalk-by)	RHM5 00AT 0000 Zxxx x

Delivery

On delivery, the default setting for the Qmodule 5.5 heat heat is:

	C-Mode	S-Mode
Due date	31.12.	31.12.
Type of readout	365 days	annually 48 days after due date
Transmission delay	none	0 days
Transmission period	8 am 6 pm, daily	8 am 6 pm, daily
Transmission-free days	none	Sunday

Device combination

One Qmodule 5.5 heat per heat meter or heat/cold meter is required.



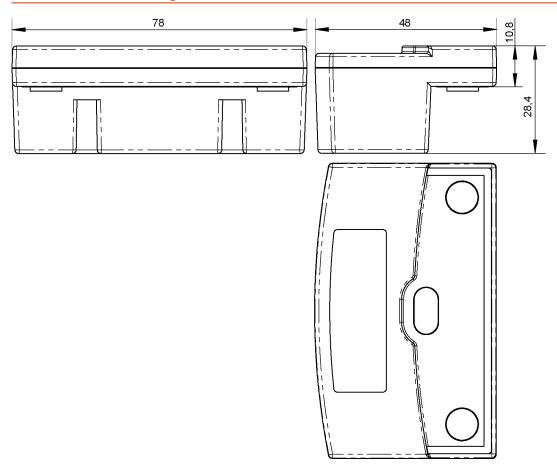
Technical data

Protection rating IP65 according to EN 60529 Protection class III according to EN 61140 Fransport -25 °C 70 °C, < 95 % r.h. (without condensation) according to EN 60721-3-2 Storage -5 °C 55 °C, < 95 % r.h. (without condensation) according to EN 60721-3-1 Use 5 °C 55 °C, < 95 % r.h. (without condensation) according to EN 60721-3-3 Radio Radio Radio S-Mode (Q AMR, Qwalk-by) C-Mode (Q AMR, Qwalk-by) S-Mode (868.3 ±0.3) MHz C-Mode (868.95 ±0.25) MHz Fransmission power S-Mode (max. 14 dBm / typ. 11 dBm) C-Mode (max. 14 dBm / typ. 11 dBm) Electromagnetic compatibility Interference resistance EN 301489-1, EN 301489-3 Emitted interference Security EN 60950, EN 62368-1 Power supply Battery type Lithium metal Deparating voltage DC 3 V	Rohs compliant	EN 50581
Protection class Ill according to EN 61140 Transport -25 °C 70 °C, < 95 % r.h. (without condensation) according to EN 60721-3-2 Storage -5 °C 45 °C, < 95 % r.h. (without condensation) according to EN 60721-3-1 Jse 5 °C 55 °C, < 95 % r.h. (without condensation) according to EN 60721-3-3 Radio Radio Radio mode S-Mode (Q AMR, Qwalk-by) C-Mode (Q AMR, Qwalk-by) Radio frequency S-Mode (868.3 ±0.3) MHz C-Mode (868.95 ±0.25) MHz Transmission power S-Mode (max. 14 dBm / typ. 11 dBm) C-Mode (max. 14 dBm / typ. 11 dBm) Electromagnetic compatibility Interference resistance EN 301489-1, EN 301489-3 Emitted interference EN 301489-1, EN 301489-3, EN 55032 Security Power supply Battery type Lithium metal Deparating voltage DC 3 V	Environment	
Transport -25 °C 70 °C, < 95 % r.h. (without condensation) according to EN 60721-3-2	Protection rating	IP65 according to EN 60529
EN 60721-3-2 Storage	Protection class	III according to EN 61140
EN 60721-3-1 Use 5 °C 55 °C, < 95 % r.h. (without condensation) according to EN 60721-3-3 Radio Radio mode S-Mode (Q AMR, Qwalk-by) C-Mode (Q AMR, Qwalk-by) Radio frequency S-Mode (868.3 ±0.3) MHz C-Mode (868.95 ±0.25) MHz Fransmission power S-Mode (max. 14 dBm / typ. 11 dBm) C-Mode (max. 14 dBm / typ. 11 dBm) C-Mode (max. 14 dBm / typ. 11 dBm) Electromagnetic compatibility Interference resistance EN 301489-1, EN 301489-3 Emitted interference EN 301489-1, EN 301489-3, EN 55032 Security EN 60950, EN 62368-1 Power supply Battery type Lithium metal Deparating voltage DC 3 V	Transport	
EN 60721-3-3 Radio Radio Marco Mode (Q AMR, Qwalk-by) C-Mode (Q AMR, Qwalk-by) Radio frequency S-Mode (868.3 ±0.3) MHz C-Mode (868.95 ±0.25) MHz Fransmission power S-Mode (max. 14 dBm / typ. 11 dBm) C-Mode (max. 14 dBm / typ. 11 dBm) Electromagnetic compatibility Interference resistance EN 301489-1, EN 301489-3 Emitted interference EN 301489-1, EN 301489-3, EN 55032 Security EN 60950, EN 62368-1 Power supply Battery type Lithium metal Deparating voltage DC 3 V	Storage	
Radio mode S-Mode (Q AMR, Qwalk-by) C-Mode (Q AMR, Qwalk-by) S-Mode (868.3 ±0.3) MHz C-Mode (868.95 ±0.25) MHz Transmission power S-Mode (max. 14 dBm / typ. 11 dBm) C-Mode (max. 14 dBm / typ. 11 dBm) Electromagnetic compatibility Interference resistance EN 301489-1, EN 301489-3 Emitted interference EN 301489-1, EN 301489-3, EN 55032 Security EN 60950, EN 62368-1 Power supply Battery type Lithium metal Deparating voltage DC 3 V	Use	
C-Mode (Q AMR, Qwalk-by) S-Mode (868.3 ±0.3) MHz C-Mode (868.95 ±0.25) MHz Fransmission power S-Mode (max. 14 dBm / typ. 11 dBm) C-Mode (max. 14 dBm / typ. 11 dBm) Electromagnetic compatibility Interference resistance EN 301489-1, EN 301489-3 Emitted interference EN 301489-1, EN 301489-3, EN 55032 Emitted interference EN 60950, EN 62368-1 Power supply Battery type Lithium metal Deparating voltage DC 3 V	Radio	
Radio frequency S-Mode (868.3 ±0.3) MHz C-Mode (868.95 ±0.25) MHz S-Mode (max. 14 dBm / typ. 11 dBm) C-Mode (max. 14 dBm / typ. 11 dBm) Electromagnetic compatibility Interference resistance EN 301489-1, EN 301489-3 Emitted interference EN 301489-1, EN 301489-3, EN 55032 Security EN 60950, EN 62368-1 Power supply Battery type Lithium metal Deparating voltage DC 3 V	Radio mode	S-Mode (Q AMR, Qwalk-by)
C-Mode (868.95 ±0.25) MHz Fransmission power S-Mode (max. 14 dBm / typ. 11 dBm) C-Mode (max. 14 dBm / typ. 11 dBm) Electromagnetic compatibility Interference resistance EN 301489-1, EN 301489-3 Emitted interference EN 301489-1, EN 301489-3, EN 55032 Encurity EN 60950, EN 62368-1 Power supply Battery type Lithium metal Operating voltage DC 3 V		C-Mode (Q AMR, Qwalk-by)
S-Mode (max. 14 dBm / typ. 11 dBm) C-Mode (max. 14 dBm / typ. 11 dBm) Electromagnetic compatibility Interference resistance EN 301489-1, EN 301489-3 Emitted interference EN 301489-1, EN 301489-3, EN 55032 Encurity EN 60950, EN 62368-1 Power supply Battery type Lithium metal Operating voltage DC 3 V	Radio frequency	S-Mode (868.3 ±0.3) MHz
C-Mode (max. 14 dBm / typ. 11 dBm) Electromagnetic compatibility Interference resistance EN 301489-1, EN 301489-3 Emitted interference EN 301489-1, EN 301489-3, EN 55032 Enecurity EN 60950, EN 62368-1 Power supply Battery type Lithium metal Operating voltage DC 3 V		C-Mode (868.95 ±0.25) MHz
Electromagnetic compatibility Interference resistance EN 301489-1, EN 301489-3 Emitted interference EN 301489-1, EN 301489-3, EN 55032 Every En 60950, EN 62368-1 Power supply Battery type Lithium metal Departing voltage DC 3 V	Transmission power	S-Mode (max. 14 dBm / typ. 11 dBm)
nterference resistance EN 301489-1, EN 301489-3 Emitted interference EN 301489-1, EN 301489-3, EN 55032 EN 60950, EN 62368-1 Power supply Battery type Lithium metal Departing voltage DC 3 V		C-Mode (max. 14 dBm / typ. 11 dBm)
Emitted interference EN 301489-1, EN 301489-3, EN 55032 Security EN 60950, EN 62368-1 Power supply Battery type Lithium metal Operating voltage DC 3 V	Electromagnetic compatibility	
Security EN 60950, EN 62368-1 Power supply Battery type Lithium metal Operating voltage DC 3 V	Interference resistance	EN 301489-1, EN 301489-3
Power supply Battery type Lithium metal Operating voltage DC 3 V	Emitted interference	EN 301489-1, EN 301489-3, EN 55032
Battery type Lithium metal Departing voltage DC 3 V	Security	EN 60950, EN 62368-1
Operating voltage DC 3 V	Power supply	
	Battery type	Lithium metal
Battery service life ¹⁾ 10 years operation + 1 year reserve + 6 months storage	Operating voltage	DC 3 V
	Battery service life1)	10 years operation + 1 year reserve + 6 months storage

¹⁾ The battery life of the compact heat meter sets (Qheat5 with factory pre-assembled Qmodule5.5heat) is 6 years.



Dimensional drawings



QUNDIS GmbH

Sonnentor 2 99098 Erfurt Germany

Phone.: +49 (0) 361 26 280-0 Fax: +49 (0) 361 26 280-175 E mail: info@qundis.com

www.qundis.com

A company of the noventic group

The information in this data sheet only contains general descriptions or product characteristics, which may not always apply in particular application cases and/or may be subject to change through further development of the product. Required product characteristics are then binding if they are expressly agreed when the contract is drawn up.

©2023 QUNDIS GmbH. Subject to change.