



## Add-on radio module

**WFZ16**  
**WFZ166**

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**Add-on modules for external water meters prepared for wireless transmission**

**The add-on radio module records and processes the counting pulses of mechanical water meters prepared for wireless transmission and transmits the data to a readout system. The add-on radio module is equipped with an optical interface for parameter setting.**

### Application

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Add-on radio modules of the type WFZ16.. are part of the AMR system, add-on radio modules of the type WFZ166.. are part of the walk-by system. Both variants are used where mechanical water meters prepared for wireless transmission are available, the data of which are to be recorded within one of these systems.

These can be meters for hot or cold water..

## Functions

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- Recording the counting pulses of the mechanical water meter prepared for wireless transmission the add-on module is fixed to
- Monitoring pulse recording
- Processing the pulses and storing consumption data and due date values
- Readout via radio and transmission of the consumption values to a readout unit without direct access to the device
- The radio module does not have its own display
- The transmission period is always given as CET (winter time) the whole year round

## Stored data

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- Current consumption value
- Due date value
- Due date
- 13 monthly values
- Error code
- Error date

## Parameter setting possibilities when using the service software

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WFZ16..

- Due date

WFZ166..

- Meter count
- Medium (cold or hot water)
- Device number

WFZ166..

- Time delay (offset) in days to the readout day
- Weekdays without telegram transmission
- Transmission period within one day (e.g. from 8 am to 6 pm CET)
- Changing parameter setting for use in AMR system (not reversible)

The measuring devices transmit status information several times a day the whole year round independently of the readout time set..

## Type summary

Special add-on radio modules for mechanical meters prepared for wireless transmission are supplied for different water meter models from different manufacturers.

Manufacturer	Water meter series	System	Type
SIEMENS GmbH	WFx30, WMx10	AMR walk-by	WFZ16.MO* WFZ166.MO*
QUNDIS GmbH	WFx30, WMx10	AMR walk-by	WFZ16.MO* WFZ166.MO*
E. WEHRLE GmbH	ETK-EAX, ETW-EAX, MTK-OZX, MTW-OZX	AMR walk-by	WFZ16.MO* WFZ166.MO*
Elster Messtechnik GmbH	EV-A, MO-A, MOZ-A	AMR walk-by	WFZ16.EL WFZ166.EL
Deltamess DWWF GmbH	Delta-AP-Funk-V, Delta-TKS-Funk-V, AMS Funk V	AMR walk-by	WFZ16.DM WFZ166.DM
	AP Funk V, M140 MO-A Funk V	AMR walk-by	WFZ16.EL WFZ166.EL
	Koax 2" Funk V	AMR walk-by	WFZ16.MO* WFZ166.MO*
Wasser-Geräte GmbH	WG ETW.. (MFS), WG UP-Zähler.. (MFS)	AMR walk-by	WFZ16.WG WFZ166.WG
	Unimeter UP-Zähler..	AMR walk-by	WFZ16.MO* WFZ166.MO*
Allmess GmbH	System measuring capsule MK +m, system watermeter V +m	AMR walk-by	WFZ16.AL WFZ166.AL

\* The Modularis counter is used by several water meter manufacturers, which means that the modules WFZ16.MO and WFZ166.MO can also be used for these.

## Order

The complete order number must be given for the order.

When devices are delivered ex factory, the following parameters are pre-set as default:

- Due date 31.12.
- Meter count 00000 m<sup>3</sup>
- Medium cold water

As to walk-by, the WFZ166 is set to:

- Annual readout
- Time delay to readout day 0 days
- Daily transmission time from 8 am to 6 pm
- No telegram transmission on Sundays

## Device combination

One add-on radio module is required per mechanical water meter prepared for wireless transmission. The add-on radio module has to be selected in line with the respective manufacturer's water meter series, as otherwise there is no guarantee that the add-on module will fit on the meter, nor that the metering function will work correctly.

**Technical data**  
**WFZ16.MO / WFZ166.MO**

General device data

Operating voltage	DC 3 V
Service life	12 years + 12 months reserve
Data transmission according to	EN 13757/4
Frequency band	868.0 MHz to 868.6 MHz
Transmission power	Typically 5 dBm
Transmission frequency	< 1 %
Pulse value	1 litres
Permissible ambient temperature during transport during storage during operation	-20 °C to max. +70 °C +5 °C to +55 °C +5 °C to +65 °C

Standards, directives and approvals

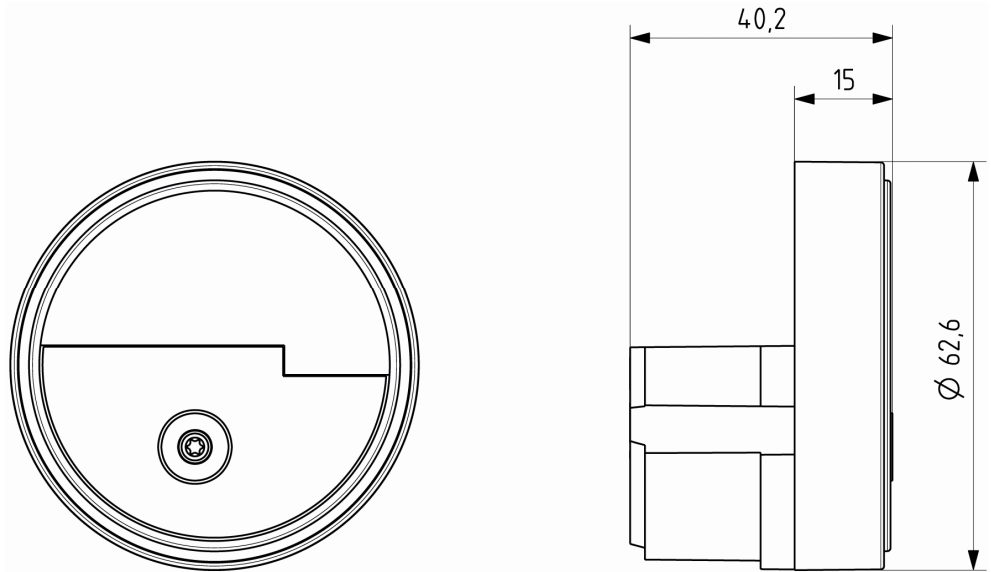
Product standard	EN 60950-1 Security of IT equipment
Electromagnetic compatibility (Applications)	For use in residential, commercial, light-industrial and industrial environ- ments
EU conformity (CE)	CE1T2879xx *)
Protection rating	IP 65

Environmental compatibility

Product environmental declaration (contains data on RoHS compliance, materials composition, packaging, environmental benefit, disposal)	CE1E2879 *)

\*) The documents can be downloaded from <http://siemens.com/bt/download>.

**Dimensional drawing**  
**WFZ16.MO / WFZ166.MO**



**Technical data**  
**WFZ16.EL / WFZ166.EL**

General device data

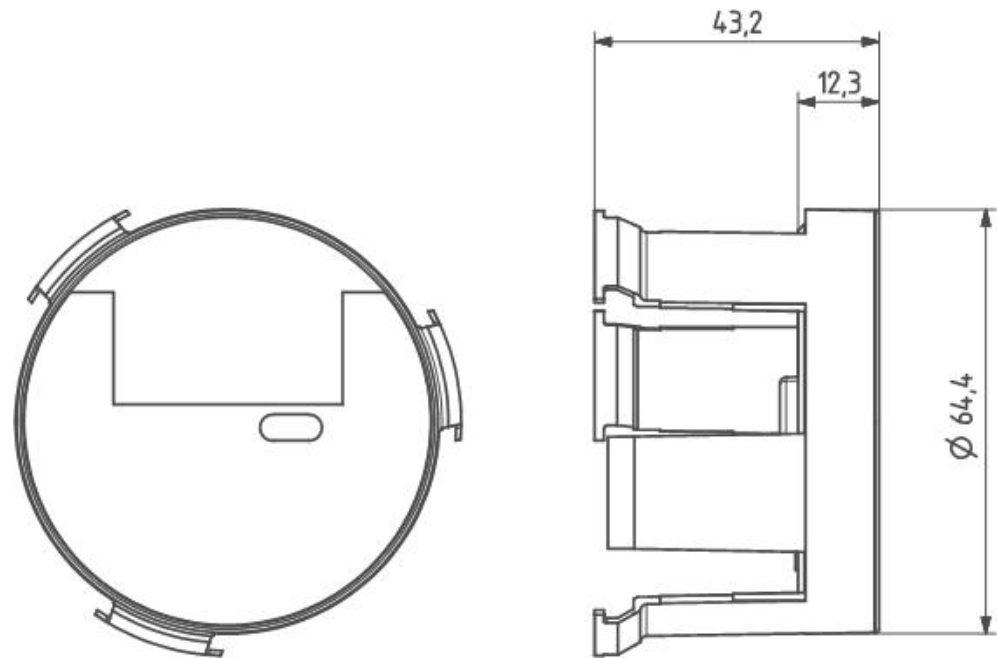
Operating voltage	DC 3 V
Service life	12 years + 12 months reserve
Data transmission according to	EN 13757/4
Frequency band	868.0 MHz to 868.6 MHz
Transmission power	Typically 5 dBm
Channel assignment	< 1 %
Pulse value	0.5 litres
Permissible ambient temperature during transport	-10 °C to max. +60 °C
Permissible ambient temperature during storage and in operation	0 °C to max. +55 °C

Standards, directives and approvals

Product standard	EN 60950-1 Security of IT equipment
Electromagnetic compatibility (Applications)	For use in residential, commercial, light-industrial and industrial environments
EU conformity (CE)	CE1T2879xx *)
Protection rating	IP 54
Product environmental declaration (contains data on RoHS compliance, materials composition, packaging, environmental benefit, disposal)	CE1E2879 *)

Environmental compatibility

\*) The documents can be downloaded from <http://siemens.com/bt/download>.



**Technical data**  
WFZ16.DM / WFZ166.DM

General device data

Operating voltage	DC 3 V
Service life	12 years + 12 months reserve
Data transmission according to	EN 13757/4
Frequency band	868.0 MHz to 868.6 MHz
Transmission power	Typically 5 dBm
Channel assignment	< 1 %
Pulse value	5 litres
Permissible ambient temperature during transport	-10 °C to max. +60 °C
Permissible ambient temperature during storage and in operation	0 °C to max. +55 °C

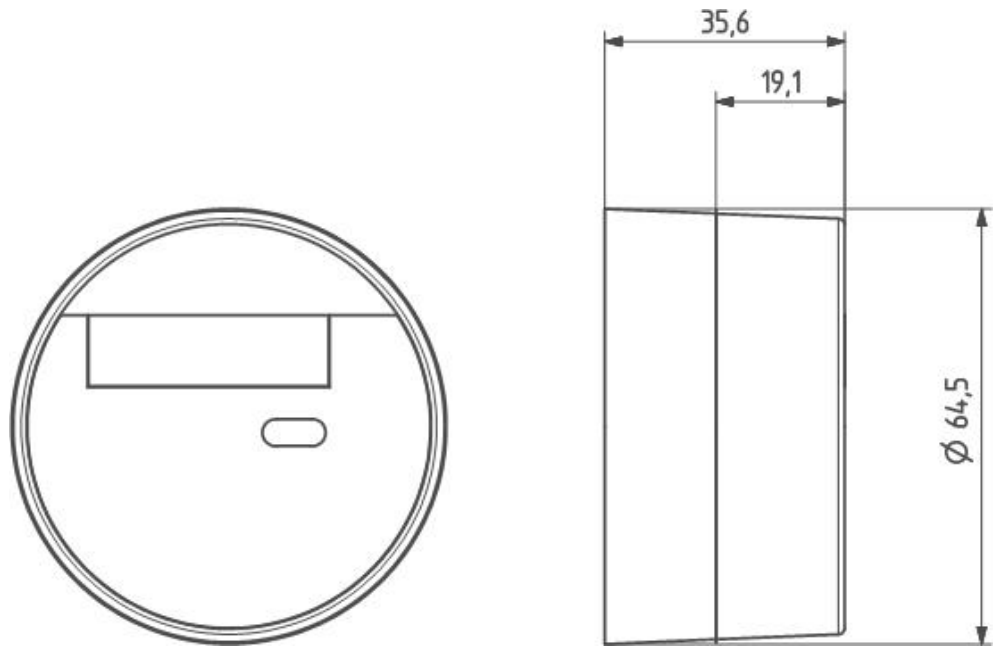
Standards, directives and approvals

Product standard	EN 60950-1 Security of IT equipment
Electromagnetic compatibility (Applications)	For use in residential, commercial, light-industrial and industrial environments
EU conformity (CE)	CE1T2879xx *)
Protection rating	IP 54
Product environmental declaration (contains data on RoHS compliance, materials composition, packaging, environmental benefit, disposal)	CE1E2879 *)

Environmental compatibility

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**Dimensional drawing**  
**WFZ16.DM / WFZ166.DM**



**Technical data**  
**WFZ16.WG / WFZ166.WG**

General device data

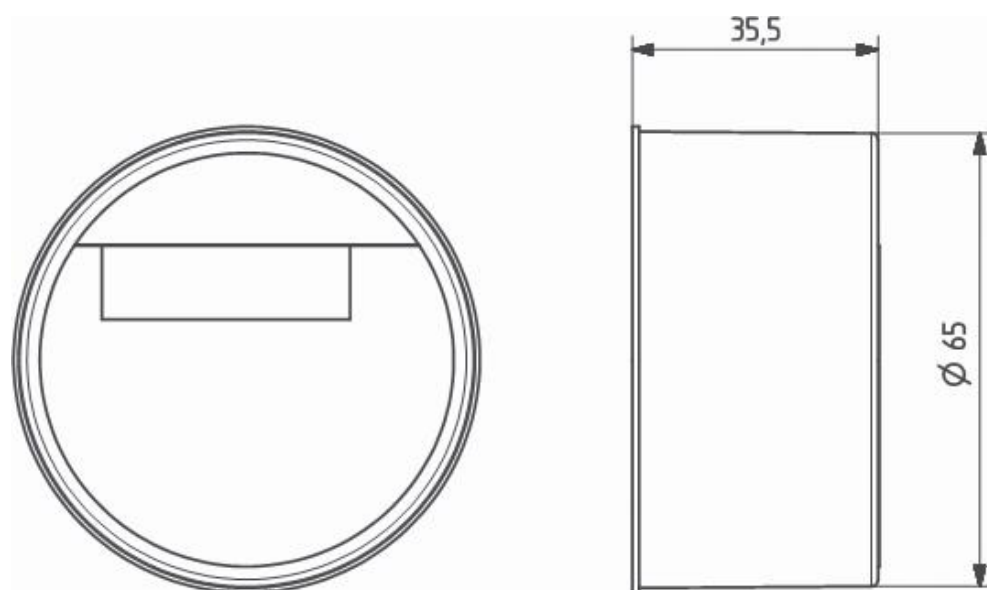
Operating voltage	DC 3 V
Service life	12 years + 12 months reserve
Data transmission according to	EN 13757/4
Frequency band	868.0 MHz to 868.6 MHz
Transmission power	Typically 5 dBm
Channel assignment	< 1 %
Pulse value	5 litres
Permissible ambient temperature during transport	-10 °C to max. +60 °C
Permissible ambient temperature during storage and in operation	0 °C to max. +55 °C

Standards, directives and approvals

Product standard	EN 60950-1 Security of IT equipment
Electromagnetic compatibility (Applications)	For use in residential, commercial, light-industrial and industrial environments
EU conformity (CE)	CE1T2879xx *)
Protection rating	IP 54
Product environmental declaration (contains data on RoHS compliance, materials composition, packaging, environmental benefit, disposal)	CE1E2879 *)

Environmental compatibility

\*) The documents can be downloaded from <http://siemens.com/bt/download>.



Technical data  
WFZ16.AL / WFZ166.AL

General device data

Operating voltage	DC 3 V
Service life	12 years + 12 months reserve
Data transmission according to	EN 13757/4
Frequency band	868.0 MHz to 868.6 MHz
Transmission power	Typically 5 dBm
Transmission frequency	< 1 %
Pulse value	1 litres
Permissible ambient temperature	
during transport	-20 °C to max. +70 °C
during storage	-5 °C to +55 °C
during operation	+5 °C to +65 °C

Standards, directives and approvals

Product standard	EN 60950-1 Security of IT equipment
Electromagnetic compatibility (Applications)	For use in residential, commercial, light-industrial and industrial environ- ments
EU conformity (CE)	CE1T2879xx *)
Protection rating	IP 65
Product environmental declaration (contains data on RoHS compliance, materials composition, packaging, environmental benefit, disposal)	CE1E2879 *)

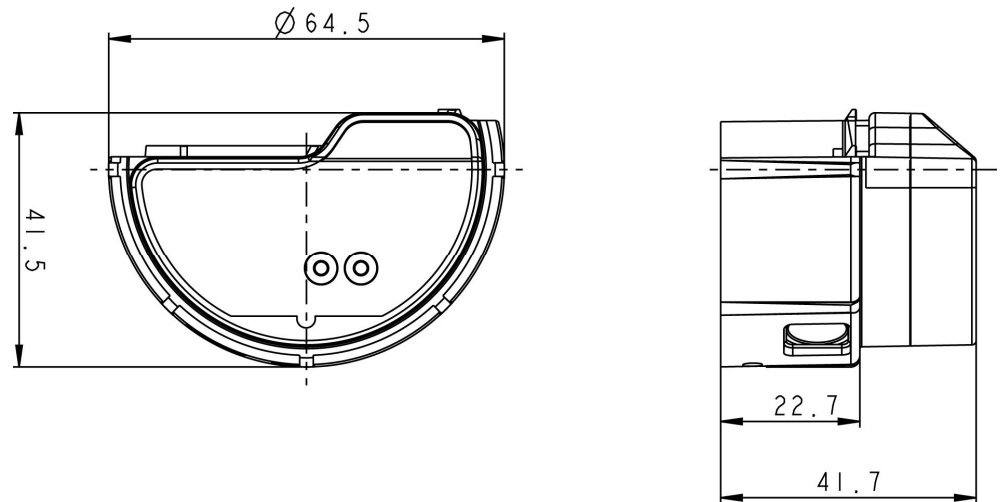
Environmental  
compatibility

\*) The documents can be downloaded from <http://siemens.com/bt/download>.



Dimensional drawing  
WFZ16.AL / WFZ166.AL

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The devices are considered electronics devices for disposal in terms of European Directive 2012/19/EU and may not be disposed of as domestic garbage.

- Dispose of the devices through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

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