

# aquaradio® / -smart Wireless meter reading

## Application

The radio modules by Aquametro enable you to log the consumption data of electricity, water, heat and gas meters. All data can be gathered in „walk- or drive-by“ operations, without entering any building. This also in rugged environmental conditions.



## Features

- Pulse or M-Bus input
- Fixed date and logger functions
- High protection class IP 68
- Standardised protocols

## Benefits

- Meter reading without need to enter premises
- Current meter value can be read at any time
- Date-specific reading
- No expensive building measures
- Secure transmission, no reading errors
- Smallest possible transmitted meter value = 1 L
- Simple data transfer to your administration software

Архангельск (8182)63-90-72  
Астана +7(7172)727-132  
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Казань (843)206-01-48

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Киров (8332)68-02-04  
Краснодар (861)203-40-90  
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Курск (4712)77-13-04  
Липецк (4742)52-20-81  
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Уфа (347)229-48-12  
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Череповец (8202)49-02-64  
Ярославль (4852)69-52-93

## Product Range



### aquaradio® smart

The aquaradio® smart radio module is designed for the following applications:

- mobile logging of water, electricity, heat and gas meters with hand terminals for "walk or drive-by" operation
- high degree of protection
- independent of local power supply
- available with Pulse, M-Bus Input or inclusive with transmitter

|                                   |                                                     |
|-----------------------------------|-----------------------------------------------------|
| <b>aquaradio® smart pulse</b>     | <b>Art. No. 80539</b>                               |
| Power supply                      | Battery, operating life approx. 15 years            |
| Radio frequency                   | 868 MHz                                             |
| Transmitting power                | 7 mW                                                |
| <b>Input</b>                      | <b>Open Collector, Reed, aquapuls®, max. 10 Hz</b>  |
| Cable length                      | 3 m, can be lengthened to 10 m <sup>1)</sup>        |
| Billing date                      | Weekly, monthly, yearly                             |
| Optical interface                 | IrDa for programming                                |
| Type of protection                | IP 68                                               |
| Ambient temperature               | -15 to 55 °C                                        |
| Transport and storage temperature | -20 to 55 °C                                        |
| Permissible ambient humidity      | 5 to 98 % relative humidity, condensation permitted |
| Mounting type                     | Wall or pipe mounting                               |
| Dimensions                        | 104 x 42 x 70 mm                                    |

<sup>1)</sup> Complies with European Directives regarding electromagnetic compatibility. Any lengthening of cable may deviate from these directives.

|                                   |                                                     |
|-----------------------------------|-----------------------------------------------------|
| <b>aquaradio® smart M-Bus</b>     | <b>Art. No. 80619</b>                               |
| Power supply                      | Battery, operating life approx. 15 years            |
| Radio frequency                   | 868 MHz                                             |
| Transmitting power                | 7 mW                                                |
| <b>Input</b>                      | <b>M-Bus</b>                                        |
| Cable length                      | 3 m, can be lengthened to 10 m <sup>1)</sup>        |
| Billing date                      | Weekly, monthly, yearly                             |
| Optical interface                 | IrDa for programming                                |
| Type of protection                | IP 68                                               |
| Ambient temperature               | -15 to 55 °C                                        |
| Transport and storage temperature | -20 to 55 °C                                        |
| Permissible ambient humidity      | 5 to 98 % relative humidity, condensation permitted |
| Mounting type                     | Wall or pipe mounting                               |
| Dimensions                        | 104 x 42 x 70 mm                                    |

<sup>1)</sup> Complies with European Directives regarding electromagnetic compatibility. Any lengthening of cable may deviate from these directives.

|                                   |                                                                          |
|-----------------------------------|--------------------------------------------------------------------------|
| <b>aquaradio® smart</b>           | <b>Art. No. 80540</b>                                                    |
| Power supply                      | Battery, operating life approx. 15 years                                 |
| Radio frequency                   | 868 MHz                                                                  |
| Transmitting power                | 7 mW                                                                     |
| <b>Input</b>                      | <b>incl. transmitter for aquabasic®, cable 3 m, resolution 100 litre</b> |
| Billing date                      | Weekly, monthly, yearly                                                  |
| Optical interface                 | IrDa for programming                                                     |
| Type of protection                | IP 68                                                                    |
| Ambient temperature               | -15 to 55 °C                                                             |
| Transport and storage temperature | -20 to 55 °C                                                             |
| Permissible ambient humidity      | 5 to 98 % relative humidity, condensation permitted                      |
| Mounting type                     | Wall or pipe mounting                                                    |
| Dimensions (without transmitter)  | 104 x 42 x 70 mm                                                         |



### Bluetooth wireless receiver for aquaradio® smart

The wireless receiver is used in conjunction with a PDA and readout software and is thus a complete wireless readout system for "walk or drive-by" operation.

- Stores up to 256 wireless telegrams
- Continuous data transmission to the PDA
- High-capacity batteries for 15 h continuous operation

| <b>aquaradio® smart</b>            | <b>Art. No. 80542</b>                    |
|------------------------------------|------------------------------------------|
| <b>Bluetooth wireless receiver</b> |                                          |
| Reception range                    | 868 MHz                                  |
| Internal memory                    | 256 wireless telegrams                   |
| Bluetooth interface                | 2.4 GHz, range approx. 10 m              |
| Display                            | 5 LED to indicate status                 |
| Power supply                       | Quick-charging battery, charger supplied |
| Operating time                     | 15 h                                     |
| Type of protection                 | IP 44                                    |
| Ambient temperature                | 0 to 60 °C                               |
| Permissible ambient humidity       | 10 to 70 % relative humidity             |
| Weight                             | 350 g                                    |
| Dimensions                         | 155 x 95 x 27 mm (without antenna)       |

### Option

Car mounting set for "drive-by" applications, consisting of an external magnet foot antenna and charging cable.

| <b>Auto installation set</b> | <b>Art. No. 80543</b> |
|------------------------------|-----------------------|
|------------------------------|-----------------------|

For one-time activation and programming, the IZAR OH BT reading head is required with a Bluetooth interface and both a PDA and appropriate software.

| <b>Reading head IZAR OH BT</b> | <b>Art. No. 80544</b>            |
|--------------------------------|----------------------------------|
| Bluetooth interface            | 2.4 GHz, range approx. 10 m      |
| Display                        | 4 LED to indicate status         |
| Power supply                   | Li-ion battery, charger supplied |
| Operating time                 | 12 h                             |
| Type of protection             | IP 40                            |
| Ambient temperature            | 0 to 40 °C                       |

## Product Range



### aquaradio®

The aquaradio® module has a high degree of IP68 protection, its own power supply and a metal casing. It is suitable for the following applications:

- high standards regarding type of protection
- rugged environmental conditions
- network-independent operation
- shaft applications with occasional immersion in water

| aquaradio®                        | Art. No. 80659                                                                     |
|-----------------------------------|------------------------------------------------------------------------------------|
| Power supply                      | Battery, operating life approx. 12 years                                           |
| Radio frequency                   | 433 MHz, bidirectional                                                             |
| <b>Inputs</b>                     | <b>2 pulse inputs, max. 10 Hz, suitable for Reed, Open Collector and aquapuls®</b> |
| Type of protection                | IP 68                                                                              |
| Ambient temperature               | -5 to 50 °C                                                                        |
| Transport and storage temperature | -20 to 55 °C                                                                       |
| Permissible ambient humidity      | 5 to 98 % relative humidity, dewing permitted                                      |
| Mounting type                     | Wall mounting with mounting set Art. No. 80190                                     |

| aquaradio®                        | Art. No. 80660                                                                               |
|-----------------------------------|----------------------------------------------------------------------------------------------|
| Power supply                      | Battery, operating life approx. 12 years                                                     |
| Radio frequency                   | 433 MHz, bidirectional                                                                       |
| <b>Input</b>                      | <b>Permanently attached with transmitter for aquabasic®, cable 2 m, resolution 100 litre</b> |
| Type of protection                | IP 68                                                                                        |
| Ambient temperature               | 0 to 50 °C                                                                                   |
| Transport and storage temperature | -20 to 55 °C                                                                                 |
| Permissible ambient humidity      | 5 to 98 % relative humidity, condensation permitted                                          |
| Mounting type                     | Wall mounting with mounting set Art. No. 80190                                               |

## Accessories

| Accessories                                                                                                                       | Art. No. |
|-----------------------------------------------------------------------------------------------------------------------------------|----------|
| Mounting set for wall mounting of aquaradio®                                                                                      | 80190    |
| Terminal box VD-22, for universal application as a connecting box to take cross-sections 0.14...1.5 mm <sup>2</sup> , max. 48 VAC | 80212    |
| Mounting set for wall mounting incl. VD-22 terminal box for aquaradio®                                                            | 80303    |

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