



Czech Metrology Institute

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Notified Body Id. No.:1383



TESTCOM – Certifying Body for Certification of Products No. 3136,
accredited by CAI according to ČSN EN ISO/IEC 17065:2013
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EU-type examination CERTIFICATE

(Radio Equipment Directive 2014/53/EU, Annex III)

No. 0120-CC-V0044-19

Product:	Ultrasonic water meter with build in radio modules
Trade name / brand name	Ultrimis W
Model / Type:	UL; UL-01
Manufacturer	Apator Powogaz S.A.
Manufacturer address:	Poznań, ul. Klemensa Janickiego 23/25 60-542 Poznań, Poland
Software version:	3.01
Hardware version:	RMv5.1; RMv5.2
Frequency bands of operation:	433 MHz; 868 MHz

The Notified Body No.:1383 - Czech Metrology Institute,
after the examination of the technical documentation as drawn by the manufacturer,
announces
that the essential requirements of Article 3.1a, 3.1b and Article 3.2
of Radio Equipment Directive 2014/53/EU (Government Decree No.: 426/2016 Coll.).
have been met.

The conformity assessment on the radio equipment listed above and as described in Annex 1 to this EU-type examination certificate has been carried out in accordance with Annex III (module B) of RADIO Equipment Directive 2014/53/EU (Government Decree No.: 426/2016 Coll., Annex 3).

A list of documentation forming the basis for the EU-type examination is provided in Annex 2 to this EU-type examination certificate.

This EU-type Examination certificate relates only to the documents as provided to CMI.

Brno, March 2 - 2020



Dr. Pavel Klenovský
Head of Notified Body and
Director General

Annex 1 to EU-type examination certificate for RED 2014/53/EU

No.: 0120-CC-V0044-19

Model: UL; UL-01

Date of issue: March 2, 2020

Technical description

The water meters type ULTIMIS (UL) are ultrasonic water meters with electronic indicating device.

Radio communication.

The radio module wakes up the meter when it is time to send the package. Through the SPI, the meter microcontroller sends the transmission details and package contents to the radio microcontroller. The radio then builds the radio package based on the transmission details entered and sends it. After sending the package, the radio returns to idle status.

When the meter is started for the first time, it sends a set of radio configurations to the radio informing you of the meter ID, encryption keys, and protocol settings that the meter should use. The radio microcontroller stores this data in its flash to minimize the amount of data that must be sent to the radio to assemble the correct package.

Basic technical parameters:

Operational Frequency Bands:	433,050 MHz – 434,790 MHz; 868,700 MHz – 869,200 MHz
Operating Frequencies	434,300 MHz 434,475 MHz 868,300 MHz 868,950 MHz
Operating Channel Width(s) –OCW	500 kHz ($f_{\text{operation}} = 434,475 \text{ MHz}$ or $868,950 \text{ MHz}$) 600 kHz ($f_{\text{operation}} = 434,300 \text{ MHz}$ or $868,300 \text{ MHz}$)
Maximum Radiated Power	< 10 mW ($f_{\text{operation}} = 434,300 \text{ MHz}$ or $434,475 \text{ MHz}$) < 10 mW ($f_{\text{operation}} = 868,300 \text{ MHz}$ or $868,950 \text{ MHz}$)
Transceiver Transponder (Tag)	Passive
(Transmitter Frequency Range	13,56 MHz \pm 7kHz)
Power Supply	2 x SAFT Lithium LS14500 3,6 V DC batteries
Operating temperature range:	5°C up to 55°C

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Annex 2 to EU-type examination certificate for RED 2014/53/E

No.: 0120-CC-V0044-19

Model: UL; UL - 01

Date of issue: March 2, 2020

1. Test report:	Report number:	Dated:
RA	8551-PT-R0266A-19	February 17, 2020
RA	8551-PT-R0266B-19	December 13, 2019
EMC	8551-PT-E0097-19	June 24, 2019
EMC	8551-PT-E0097A-19	October 21, 2019
Product Safety	8551-PT-B0266-19	December 30, 2019
RF safety	EN 62311 ULTRIMIS TEST Report	

2. Certificate: - - -

3. Technical Documentation provided:

- 868 RadioModuleV5_1 Diagram
Ultrimis - welmec descripton v03.10 rev1 2019-02-15
5020-000000_certificate drawing
5025-0x0x00_drawing
DoC ultrimisqm-001-03-34
RMv5_2 Diagram
Risk assessment
SW -TA3B-RM_OffVer-03.01_IntVer-2.7.1_64k.bin
- Label Ultrimis

4. Standards used to demonstrate conformity with the essential requirements of Radio Equipment Directive 2014/53/EU:

Radio Spectrum ((Article 3.2):	ETSI EN 300 220-1 V3.1.1 ETSI EN 300 220-2 V3.1.1 ETSI EN 300 330 V2.1.1
EMC (Article 3.1.b):	ETSI EN 301 489-1 V2.1.1 ETSI EN 301 489-3 V2.1.1 ČSN EN 55032 ed.2:2017 ČSN EN 61000-4-2 ed.2:2009 ČSN EN 61000-4-3 ed.3:2006 +A1:2008, +Z1:2010, +A2:2011
Product Safety (Article 3.1a)	EN 62 368-1:2015, +A11:2017, +Cor.1:2017, +Cor.2:2018
RF Safety (Article 3.1a)	EN 62311:2008

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Annex 2 to EU-type examination certificate for RED 2014/53/EU

No.: 0120-CC-V0044-19

Model: UL; UL - 01

Date of issue: March 2, 2020

Additional information:

This is Class 1 device.

Radio Equipment Directive 2014/53/EU, Article 10.4: Manufacturers shall keep the technical documentation and the EU declaration of conformity for 10 years after the radio equipment has been placed on the market.

Radio Equipment Directive 2014/53/EU, Article 10.6: Manufacturers shall ensure that radio equipment which they have placed on the market bears a type, batch or serial number or other element allowing its identification, or, where the size or nature of the radio equipment does not allow it, that the required information is provided on the packaging, or in a document accompanying the radio equipment.

Radio Equipment Directive 2014/53/EU, Article 10.7: Manufacturers shall indicate on the radio equipment their name, registered trade name or registered trade mark and the postal address at which they can be contacted or, where the size or nature of radio equipment does not allow it, on its packaging, or in a document accompanying the radio equipment. The address shall indicate a single point at which the manufacturer can be contacted. The contact details shall be in a language easily understood by end-users and market surveillance authorities.

Radio Equipment Directive 2014/53/EU, Article 10.8: Manufacturers shall ensure that the radio equipment is accompanied by instructions and safety information in a language which can be easily understood by consumers and other end-users, as determined by the Member State concerned. Instructions shall include the information required to use radio equipment in accordance with its intended use. Such information shall include, where applicable, a description of accessories and components, including software, which allow the radio equipment to operate as intended. Such instructions and safety information, as well as any labelling, shall be clear, understandable and intelligible.

The following information shall also be included in the case of radio equipment intentionally emitting radio waves:

- (a) frequency band(s) in which the radio equipment operates;
- (b) maximum radio-frequency power transmitted in the frequency band(s) in which the radio equipment operates.

Radio Equipment Directive 2014/53/EU, Article 10.9: Manufacturers shall ensure that each item of radio equipment is accompanied by a copy of the EU declaration of conformity or by a simplified EU declaration of conformity. Where a simplified EU declaration of conformity is provided, it shall contain the exact internet address where the full text of the EU declaration of conformity can be obtained

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Radio Equipment Directive 2014/53/EU, Article 10.10: In cases of restrictions on putting into service or of requirements for authorization of use, information available on the packaging shall allow the identification of the Member States or the geographical area within a Member State where restrictions on putting into service or requirements for authorization of use exist. Such information shall be completed in the instructions accompanying the radio equipment.

Radio Equipment Directive 2014/53/EU, Article 19.2: On account of the nature of radio equipment, the height of the CE marking affixed to radio equipment may be lower than 5 mm, provided that it remains visible and legible.

Radio Equipment Directive 2014/53/EU, Article 20.1: The CE marking shall be affixed visibly, legibly and indelibly to the radio equipment or to its data plate, unless that is not possible or not warranted on account of the nature of radio equipment. The CE marking shall also be affixed visibly and legibly to the packaging.

Radio Equipment Directive 2014/53/EU, Annex III, Module B7: The manufacturer shall inform the notified body that holds the technical documentation relating to the EU-type examination certificate of all modifications to the approved type that may affect the conformity of the radio equipment with the essential requirements of this Directive or the conditions for validity of that certificate. Such modifications shall require additional approval in the form of an addition to the original EU-type examination certificate.

In accordance with Notified Body guidance; if there are no changes, a Notified Body EU-type examination certificate has a validity of 10 years from the date of issue.

The Declaration of Conformity under Directive 2014/53/EU or a copy thereof must be supplied with each device.

Device designation:



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