Datum:23.08.2019.

Proposal number: _____
Proposal date:_____

Bussines proposal form

Single-phase electricity meter PHOBOS 1

Bidder name:	Energy Trading and Investment
Headquarters, street and number:	Dobropoljska 26-28, Beograd Tel. +381 62 815 19 45
Registration number:	21293628
Tax ID:	110080345
Activity Code:	3514
Person for contact:	Goran Đorđević, +381 62 8151945, goranenergy47@gmail.com
USD Bank Account:	285-2291209900592-79
EUR Bank Account:	285-2291209900591-82

Ordinal number	Name of the service	Unit of measure	Price without VAT per month in USD	Price without VAT per year in USD	VAT Price	Total price in USD with VAT per year
1.						

**Offer validity period - 30 (thirty) days from the date of opening the offer.

B i d d e r

_____
(signature of the authorized person)

System payment options

Option 1	Option 2	Option 3	Option 4
Use Mobile_Application on android or iPhone or windows mobile. Scan the hidden QR code from the mobile and recharge his meter	Dial a phone number from his mobile or landline phone and enter his meter ID and pin Number then enter the hidden Scratch card digits to recharge his meter	Go to a website access his account and get list of his meters. Choose a meter and recharge it by entering the hidden scratch card digits	Go to a point of sale where the remote control Keypad is fixed enter his meter ID and PIN code and enter the hidden scratch card digits to recharge his meter. Note that the remote control unit does not require any internet connectivity as it is communicating with the system via the IoT network over the air.

* All 4 options are included in our system. The end user is free to use any one of them any time anywhere. No need to access the basements or understair cases or the dangerous electicity rooms in the buildings to reach to his keypad in his meter to be able to load it.
You can do it even if he is far or outside or traveling... why to loose electricity and disconnect the fridge or other appliances or CCTV system or security systems if you forget to load his meter.

** Meters are Smart to be simple, to really talk to you, to make your life easy

*** Option 2 including recharge by sending the hidden scratch card digits via SMS messages

ENERGY TRADING AND INVESTMENT doo, Beograd 11080, Dobropoljska 26-28
Tel. +381 62 815 19 45, e-mail: info@etidoo.com
Šifra delatnosti: 3514 | PIB: 110080345 | Matični broj: 21293628
Tekući račun: RSD 285-2291000001126-85 | EUR 285-2291209900591-82 | USD 285-2291209900592-79

TECHNICAL SPECIFICATIONS

Three-phase electricity meter PHOBOS 3

This three phase PHOBOS 3 NB-Fi Connected Smart Meter offers multi-tariff metering, load limiting and remote control features via NB-Fi by WAVIoT Wireless Protocol.NB-Fi Protocol enables very-long-range wireless communications (up to 10 km in urban areas; up to 30 km in rural).
PHOBOS 3 NB-Fi Connected Smart Meter by WAVIoT and NB-Fi Wireless Network allowing you to deploy true low-cost Automatic Metering smart grid solution in any point of the world within days and even hours.

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Key features

- 10+ km range in the urban environment
- Remote power off & power on feature
- Backup power to keep network connectivity during power outages
- No Mobile Network or Internet connection are require
- No additional wires required
- 30+ km range in rural area
- Load limiting feature
- All readings is automatically uploaded into WAVIoT Cloud
- NB-Fi Ultra Narrow Band technology provides very good signal penetration through walls and hard-to-reach areas

Specifications

Weight	**1600g**
Dimensions	**290 x 180 x 90 mm**
Frequency band	**Any part of ISM band**
Multi-tariff feature	**Yes (up to 4 rates)**
Operating Temperature	**-40 … +85 ºC**
Operating Voltage	**110 VAC; 220 VAC**
Interfaces	**RS-485 9600 8N1**
Backup Battery	**3.6 V Lithium AA-type Battery (up to 10 years battery life)**

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Detailed Technical Specifications

Scope

Static three-phase electricity meter WAVIoT EM 3 (further referred as – meter) is intended for active and reactive electric energy measurements according to the requirements of IEC 62052-11:2016 (2003), IEC 62053-21:2016 (2003), IEC 62053-22:2016 (2003), IEC 62053-23:2016 (2003), power quality measurements according to the requirements of IEC 61000-4-30:2015 in AC three-phase four-wire electric networks of power frequency (50 Hz).

Description and principle of operation

The principle of operation of the meters is based on the preliminary scaling of the input voltage and current with their further conversion into a digital code and processing, as well as subsequent display of measurement results and data on the monitor (display) of the reading device or remote display:

- the amount of electric active energy, not less than 4 tariffs, and the amount (consumption, generation), kWh;
- the amount of electric reactive energy, not less than 4 tariffs, and the amount (consumption, generation), kvar · h;
- network parameters (AC phase voltage, AC line voltage, alternating current (AC) strength in each phase, active, reactive and total output (electric power) (for each phase and for all phases combined), power factor for each phase and combined, network frequency);
- power quality parameters of electric energy (optional, positive and negative voltage deviation, frequency deviation, voltage dip duration and depth, overvoltage duration);
- current time and date.

The meters are available in two designs – for indoor (further referred as – indoor meters) and for outdoor installation (further referred as – outdoor meters). Outdoor meter consists of two separated parts – a measuring unit and a remote display.

The construction of the meters (measuring unit for outdoor installation) consists of an enclosure and a transparent terminal block cover.

Inside the enclosure there are a printed circuit board, terminal block, the measuring elements with three current (strength) measurement circuits and three voltage measurement circuits in AC three-phase network, and also a circuit for current strength control in neutral conductor (optional), auxiliary circuits (including reserve power supply, interfaces, remote signaling inputs), built-in real-time clock (further referred as – RTC), independent power supply (lithium battery), the relay for the load breakaway or alarm relay (optional), LCD display (for indoor meters).

The access seal of the terminal block cover prevents access to the terminal block. The housing cover with the access seal prevents from access to the interior arrangement of the meter. On the cover of the indoor meter and on the enclosure of outdoor meter the connection scheme of the meters is placed.

Under the cover of the indoor meter's terminal block additionally, there are relay terminals for the external switching device control (for meters with transformer connection, optional), terminals for connecting reserve power supply, Ethernet connector (optional), remote signaling inputs (optional).

Under the cover of the upper part of the indoor meter's enclosure there are contacts of impulse electric outputs and contacts of RS 485 interface and its power supply (optional), as well as a terminal for connection of an external antenna (connected if necessary to improve the quality of communication via the radio interface).

On the front panel of the indoor meter there are two buttons for the data display control.

Communication between the remote display for outdoor meter and the meter measuring block is carried out via the radio interface. On the front panel of the remote display there are also two buttons for the data display control and an additional keyboard for the input of digital information.

For the transmission of measurement results and information in measuring systems and teleautomatics systems, communication with meters with the aim of their maintenance and settings in the operating process, the auxiliary circuits of the meter are used on the basis of which they may be implemented separately or together:

- radio module (optional);
- optical type interface (optical port, optional);
- RS-485 data interface (optional);
- Ethernet interface (optional);
- impulse output optical device;
- impulse output electric device (only for indoor meters, it may also be used as a remote control device in teleautomatics systems);
- relay for control of external switching device (for meters with transformer connection, including that as control device in teleautomatics systems, optional).
- alarm inputs (optional, up to 40 inputs).

In the meter with the radio interface a function of initiative communication with the measuring systems is realized, including:

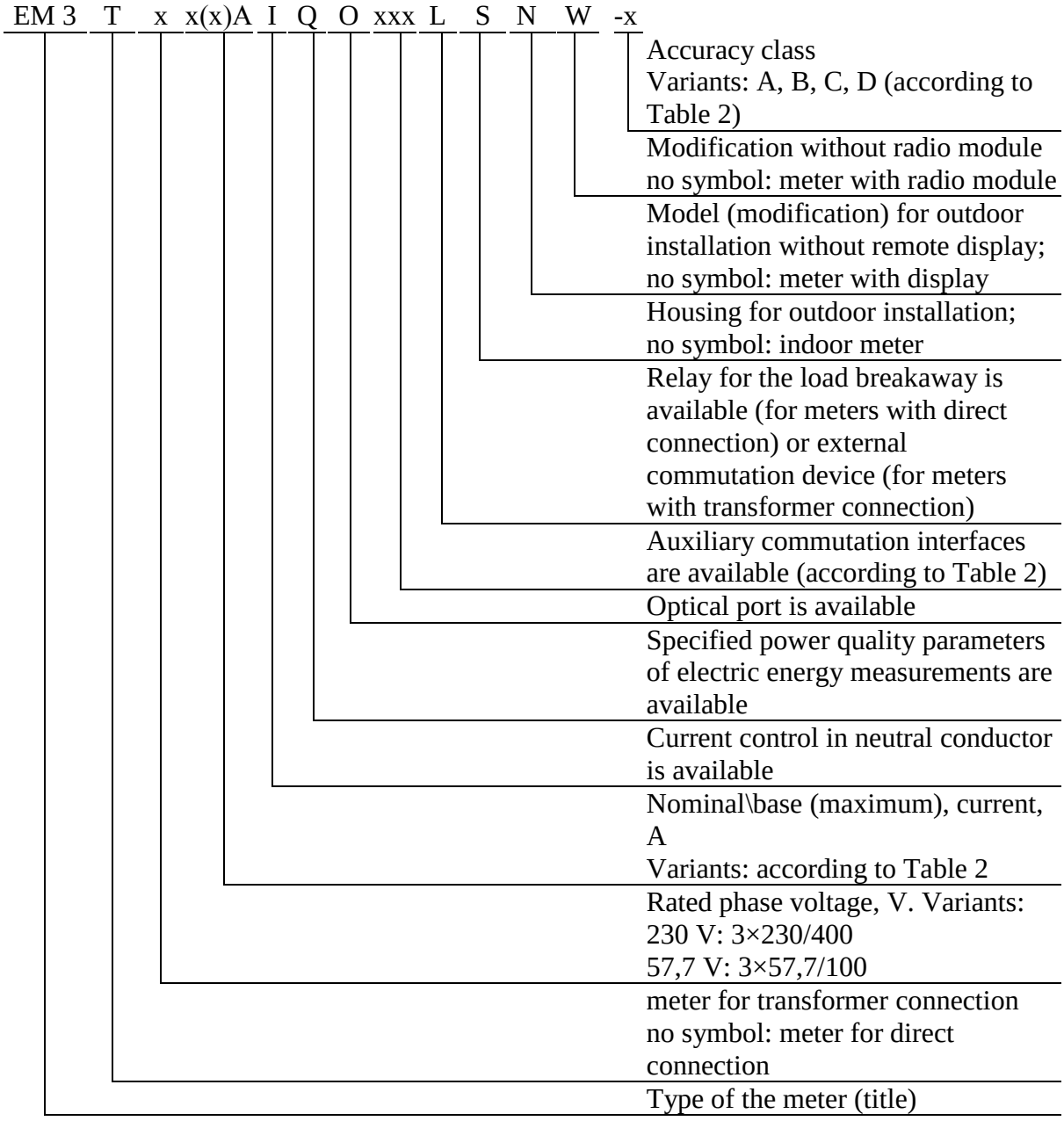
- at opening of the terminal cover;
- when exposed to an excessive magnetic field;
- when reprogramming;
- when other programmable events occur, including those providing the functionality of teleautomatics systems.

The meters have built-in non-volatile real-time clock with the current time (seconds, minutes, hours) and calendar (date, month, year) support. The meters support up to 4 tariffs in accordance to DLMS. The meters have non-volatile memory that stores data when power is turned off for more than 30 years.

The metes provide the following auxiliary functions:

- control of opening the housing (enclosure) cover;
- control of opening the cover of the meter terminal block;
- temperature control inside the meter;
- control of the impact of excessive magnetic field;
- control of AC voltage network and voltage dropout (failure);
- power control of the connected load;
- control of reverse power flow;
- checking and measurements of the phase rotation;
- monitoring of the presence of phase voltages;
- control of the absence of voltage in the presence of current in the measuring circuits;
- control of deviation of power quality indicators;
- access control via interfaces;
- control of remote alarm input status;
- monitoring (control) of unbalance current in the phase and neutral conductors;
- remote switching control (disable\enable) of the connected load or external commutation device via the command from the measuring system (optional);
- automatic switching control (disable\enable) of the connected load or external commutation device according to the established criterion of the parameters controlled by the meter (optional);
- self-diagnosis of the meter.

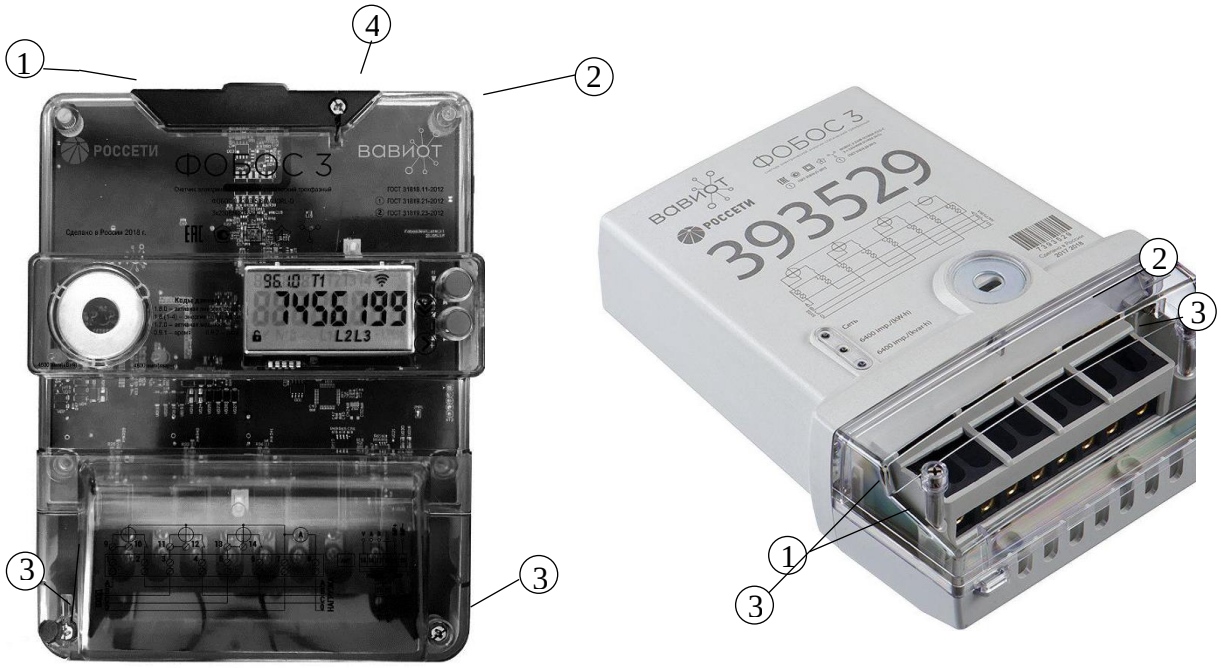
The possible modifications for WAVIoT EM 3 meter is represented on Picture 1.



Picture 1. Modifications of WAVIoT EM 1 meter.

– Note: if there is no option, there is no corresponding symbol in the modification.

General view and the scheme of access seals of the meters are represented on Picture 2.



a) Indoor meter WAVIOT EM 3

b) Outdoor meter WAVIOT EM 3

1. Place of the manufacturer's sealing
2. Place of the metrological service's sealing
3. Place of the maintaining company's sealing on the terminal block cover
4. Place of the maintaining company's sealing on the cover providing access to the ports RS-485 and impulse outputs

c) remote display

Picture 2. General view and the scheme of sealing the meters.

The metes contain the event registration journal, which records events, time and date of their start/termination including:

- terminal cover opening;
- opening of the case (enclosure) of the meter;
- reprogramming;
- impact of excessive magnetic field;
- the fact of communication with the meter by means of the interface, which led to the data change:
- voltage deviations from the specified limits in the measuring circuits;
- relay status changes;
- changes of the current time and date values during the time synchronization;
- attempt to access the interface with an unauthorized password;
- remote signaling inputs status changes, as well as the results of self-diagnosis;
- measuring unit (block);
- computing unit (block);
- timer;
- power supply;
- display;
- memory block (calculation of check sum).

Metrological and technical characteristics

The ranges of measured values and the limits of permissible measurement errors are represented in Table 2.

Parameters	Value
Type of voltage close-in (circuits switching)	Direct or transformer connected
Type of current close-in (circuits switching)	Direct or transformer connected
Accuracy class for active electric energy measurements for the following modifications (with according IEC standard): – A (IEC 62053-22) – B (IEC 62053-22) – C (IEC 62053-21) – D (IEC 62053-21)	 0,5S 0,5S 1 1
Accuracy class for reactive electric energy measurements for the following modifications (with according IEC standard): – A – B (IEC 62053-23) – C (IEC 62053-23) – D (IEC 62053-23)	 0,5* 1 1 2
Meter constant, imp./ kWh(imp./kvar * h)	from 800 to 10000
Rated phase / linear (system) voltage U_{nom}, V: – for meters with direct and transformer connection – for meters with transformer connection	 3×230/400 3×57,7/100
Maximum operating voltage range, V	from $0,8 \cdot U_{nom}$ to $1,2 \cdot U_{nom}$
Base current I_b, A	5, 10, 20
Rated current I_{nom}, A	1, 2, 5, 10
Maximum current I_{max}, A	2, 10, 60, 80, 100
Nominal value of network frequency, Hz	50±0,5
AC phase voltage measurement range, V	from 0,8 U_{nom} to $1,2 \cdot U_{nom}$
Limits of permissible relative error of AC phase voltage measurement, %	±0,5
Alternating current (AC) strength range, A: – for meters with direct connection – for meters with transformer connection	 from $0,05 \cdot I_b$ to I_{max} from $0,01 \cdot I_{nom}$ to I_{max}
Limits of permissible relative error of alternating current (AC) strength, %	±0,5
Range of negative AC voltage deviation measurement $\delta U_{(-)}$, %	from -20 to 0
Range of positive AC voltage deviation measurement $\delta U_{(+)}$, %	from 0 to +20

Table 2 (next page)

Parameters	Value
Limits of permissible absolute error of measurement of negative and positive AC voltage deviation, %	±0,5
Measuring range of AC frequency deviation Δf, Hz	from 45,0 to 57,5
Limits of permissible absolute error of measurement of AC frequency deviation, Hz	±0,03
Measuring range of AC frequency deviation Δf, Hz	from -5,0 to +7,5
Limits of permissible absolute error of measurement of AC frequency deviation, Hz	±0,03
Range of voltage dip and interruption duration measurement, Δt_i, s	from 0,02 to 60
Limits of permissible absolute error of voltage dip and interruption duration measurement, s	±0,04
(Voltage) dip threshold measurement range $\delta U_{d\,th}$, %	from 0 to 20
Limits of permissible absolute error of (voltage) dip threshold measurement, %	±0,5
Range of overvoltage duration measurement $\Delta t_{overvoltage U}$, s	from 0,02 to 60
Limits of permissible absolute error of overvoltage duration measurement, s	±0,04
Measurement range of the power factor K_P	from -1 to +1
Limits of permissible absolute error of the power factor measurement	±0,02
Range of active electric power measurement P, W – for meters with direct connection – for meters with transformer connection	from $0{,}8 \cdot U_{nom}$ to $1{,}2 \cdot U_{nom}$, $0{,}25 \le \lvert K_P \rvert \le 1$ from $0{,}05 \cdot I_b$ to I_{max} from $0{,}01 \cdot I_{nom}$ to I_{max}
Limits of permissible relative error of active electric power measurement, %, for the following models (modifications): – A and B – C and D	 ±0,5 ±1,0
Range of reactive electric power measurement Q, var – for meters with direct connection – for meters with transformer connection	from $0{,}8 \cdot U_{nom}$ to $1{,}2 \cdot U_{nom}$, $0{,}25 \le \lvert K_Q \rvert \le 1$ from $0{,}05 \cdot I_б$ to I_{max} from $0{,}01 \cdot I_{nom}$ to I_{max}
Limits of permissible relative error of reactive electric power measurement, %, for the following models (modifications): – A – B and C – D	 ±0,5 ±1,0 ±2,0

Range of total output (electric power) measurement *S*, V·A: – for meters with direct connection – for meters with transformer connection	from $0,8 \cdot U_{nom}$ to $1,2 \cdot U_{nom}$, from $0,05 \cdot I_b$ to I_{max} from $0,01 \cdot I_{nom}$ to I_{max}

Table 2

Parameters	**Value**
Limits of permissible relative error of total output (electric power) measurement, %, for the following models (modifications): – A – B and C – D	 ±0,5 ±1,0 ±2,0
Limits of permissible absolute error of measurement of the current time, s / day	±0,5
Limits of permissible additional absolute error of measurement of the current time due to ambient temperature change for each 1 °C, s per day	±0,1
Starting current for meters of the following accuracy classes, not less: – class 0,5S according to IEC 62053-22 and class 0,5 (with transformer connection) – class 1 according to IEC 62053-21 and IEC 62053-23 (with direct connection)	 $0,001 \cdot I_{nom}$ $0,004 \cdot I_b$
Total output (electric power) consumed by the current circuit, at fundamental (rated) current, rated frequency and normal temperature, V·A, not more	0,1
Total (active) electric power (output) consumed by the voltage circuit (without additional communication modules) at rated voltage, normal temperature and rated frequency, V A (W), not more	10,0 (2,0)
Number of tariffs, not less	4
Availability of additional interfaces for the following models (modifications)**: –R – RS-485, bit rate per second, bit/s, not less –E – Ethernet, bit rate per second, M bit/s, not less –T(1-16) – remote indication (signaling) (1-16 inputs)	 9600 10 -
Supported exchange protocols: -via NB-Fi radio interface -via optical port -via RS-485	 NB-Fi, DLMS, IEC 60870-5-104:2016 DLMS;

-via Ethernet	DLMS, IEC 60870-5-101:2015 DLMS, IEC 60870-5-104:2016
Maximum number of inputs of remote indication (signaling) type «dry contact»	40
Characteristics of inputs of remote indication (signaling): – maximum voltage, V – input resistance, kOhm	 30 15

End of Table 2

Parameters	**Value**
Maximum number of inputs of remote indication (signaling) (solid state relay (SSR) \ «dry contact»)	2 (1\1)
Characteristics of outputs of remote indication (signaling): – for solid state relay (SSR) (maximum voltage\current strength), V/A – for outputs of «dry contact» type (maximum voltage\current strength), V\mA: – resistance in the open position, Ohm, not more – resistance in the open position, kOhm, not less	 350\1 20\30 200 50
DC supply voltage from reserve power supply, V	from 8,0 to 16,0
DC current strength, consumed from reserve power supply, mA, not more	100
Lifetime of the built-in battery, years, not less	16
Period of data storage when power is turned off, years, not less	30
Protection degree according to IEC 60529:2013, for meters of models (modifications): – for indoor installation – for outdoor installation – (mobile) remote display RD-2	 IP51 IP54 IP51
Overall dimensions (height; length; width), mm, not more, for meters of models (modifications): – for indoor installation – for outdoor installation (without holder (bracket) – (mobile) remote display RD-2 (without power supply adapter)	 235×171×65 271×190×82 150×105×30
Weight of meters, kg, not more: – for indoor installation – for outdoor installation – (mobile) remote display RD-2 (without power supply adapter)	 1,5 2,0 0,3
Mean time between failures, h, not less	280000

Average lifetime of the meter, years, not less	30
Normal conditions: – ambient temperature, °C – relative humidity, %	 from +15 to +25 from 30 to 80
Operating conditions: – ambient temperature (except the remote display), °C – ambient temperature for the remote display RD-2 , °C – relative humidity at ambient temperature +25 °C, %, not more	 from -40 to +70 from 0 to +50 98
Notes * - measurement ranges and limits of permissible errors for accuracy class 0,5 are represented in Tables 3 – 8; ** - in the case of multiple interfaces, including the same type, the characters are specified the appropriate number of times.	

Limits of permissible additional error (for AC phase voltage, alternating current (AC) strength, negative and positive AC voltage deviation, AC frequency, AC frequency deviation, voltage dip and interruption duration, voltage dip depth, overvoltage duration, power factor, active output (electric power), reactive output (electric power), total output (electric power), caused by the change of ambient temperature ±10 □C make up ½ of the maximum permissible basic error.

Limits of permissible relative error for accuracy class 0,5 at reactive electric energy in normal conditions at symmetric three-phase loading correspond to the values specified in Table 3.

Table 3

AC current strength value, A	**Ratio sin φ (at inductive and capacitive load)**	**Limits of permissible relative error , %**
$0,01 \cdot I_{nom} \le I < 0,05 \cdot I_{nom}$	1	±1,0
$0,05 \cdot I_{nom} \le I \le I_{max}$		±0,5
$0,02 \cdot I_{nom} \le I < 0,10 \cdot I_{nom}$	0,5	±1,0
$0,10 \cdot I_{nom} \le I \le I_{max}$		±0,6
$0,10 \cdot I_{nom} \le I \le I_{max}$	0,25	±1,0

Limits of permissible relative error for accuracy class 0,5 during reactive electric energy measurements at single-phase loading and symmetric multiphase voltages applied to voltage circuits, correspond to the values, represented in Table 4

Table 4.

AC current strength value, A	**Ratio sin φ (at inductive and capacitive load)**	**Limits of permissible relative error , %**
$0,05 \cdot I_{nom} \le I \le I_{max}$	1	±0,6
$0,10 \cdot I_{nom} \le I \le I_{max}$	0,5	±1,0

Limits of permissible additional relative error of reactive electric energy measurements of forward and reverse directions for accuracy class 0,5, caused by power supply voltage variation within the limits:

– from $0{,}8 \cdot U_{nom}$ to $1{,}2 \cdot U_{nom}$, at symmetric loading correspond the values, represented in Table 5;

– from 0 to $0{,}8 \cdot U_{nom}$, at symmetric loading should be limited in the range from plus 10 to minus 100 %.

Table 5.

AC current strength value, A	**Ratio *sin φ* (at inductive and capacitive load)**	**Limits of permissible additional relative error, %**
$0{,}05 \cdot I_{nom} \le I \le I_{max}$	1	±0,20
$0{,}10 \cdot I_{nom} \le I \le I_{max}$	0,5	±0,40

Limits of permissible additional relative error of reactive electric energy measurements of forward and reverse directions for accuracy class 0,5 network frequency deviation within ±2 % from $f_{nom.}$ correspond the values, represented in Table 6.

Table 6

AC current strength value, A	**Ratio *sin φ* (at inductive and capacitive load)**	**Limits of permissible additional relative error, %**
$0{,}05 \cdot I_{nom} \le I \le I_{max}$	1	±0,20
$0{,}10 \cdot I_{nom} \le I \le I_{max}$	0,5	

The change in the error of the meters when measuring the reactive energy of forward and reverse directions for accuracy class 0,5, caused by the return to the normal switching after the earth fault of one of the three phases, corresponds to the values represented in Table 7.

Table 7

Meter accuracy class	**Limits of error measurements, %**
0,5	±0,30

The average temperature ratio of the meters in the temperature subranges from minus 40 to plus 70 °C when measuring the reactive energy of the forward and reverse directions for accuracy class 0,5 corresponds to the values represented in Table 8.

Table 8

AC current strength value, A	**Ratio sin φ (at inductive and capacitive load)**	**Average temperature ratio during reactive energy and power measurements, %/°C,**
$0{,}05 \cdot I_{nom} \le I \le I_{max}$	1	±0,03
$0{,}10 \cdot I_{nom} \le I \le I_{max}$	0,5	±0,05

Packing list

Packing list for WAVIoT EM 3 is represented in Table 9.

Table 9

Item	QTY
Single-phase electricity meter WAVIoT EM 3 in package*	1
Passport for the meter	1
User guide for the meter**	1
Remote display in package***	1
Remote display secondary power adapter with mini USB cable***	1
Battery AAA type***	4
User guide for the remote display***	1
Software «DLMS_client_waviot»**	-
Notes: *Modification of the meter, availability of a set of mounting parts and accessories is determined by the supply contract. **In case of agreement with the customer it may be placed on the website of the manufacturer or supplier. ***Only for outdoor meters	

Characteristics of NB-Fi communication module

WAVIoT is an innovator in a Low Power Wide Area Network (LPWAN) technologies that power the M2M telemetry and Internet of Things. WAVIoT uses the NB-Fi standard that is based on Ultra Narrow Band (UNB) radio technology and operates in the license-free Sub-1 GHz frequency bands.

WAVIoT devices connected by the NB-Fi protocol use significantly less power and operate over large distances compared to Wi-Fi and Bluetooth connection protocols which require more power and work best in short range. Numerous devices send data through the WAVIoT bi-directional gateways. The gateways then detect, demodulate, and report the messages to the WAVIoT Cloud. The WAVIoT Cloud then exchanges these messages with the required customer servers and IoT applications platforms.

Table 4. Characteristics of NB-Fi communication module, modification for Europe

Parameter	Value
Wireless protocol	Bi-directional NB-Fi communications standard by WAVIoT
Distance ranging	Up to 10 km (urban), up to 30 km (rural)
Network topology	Star
Uplink frequency (for sending the NB-Fi messages to gateway)	868.1 MHz DC 1%, TX power 25 mW
Downlink (for receiving the NB-Fi messages from gateway)	869.6 MHz

Normative documentation, containing requirements to WAVIoT EM 3

1. IEC 62052-11: 2016 / 2003 Electricity metering equipment (a.c.) - General requirements - Tests and test conditions - Part 11: Meters for electric energy (metering equipment)

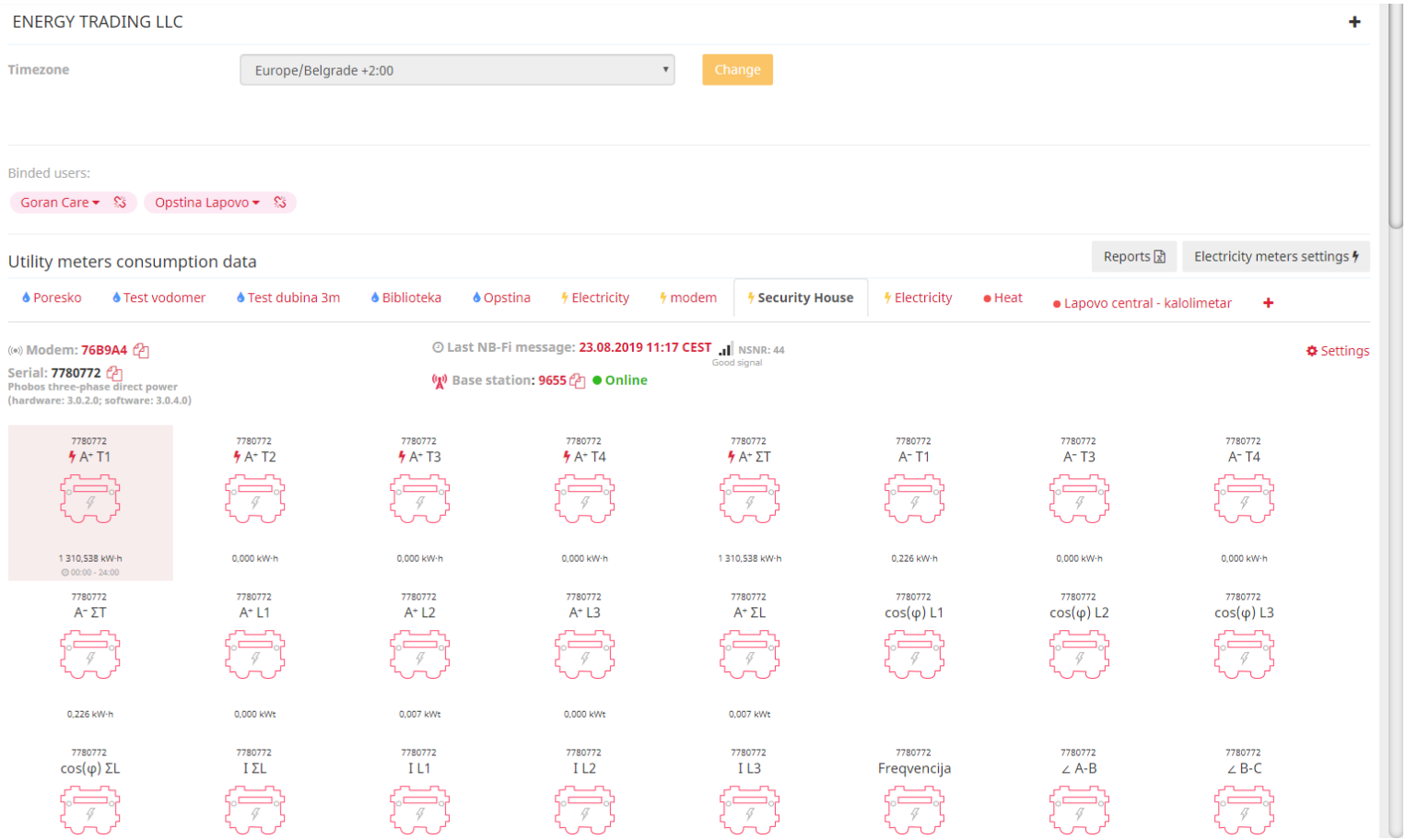
2. IEC 62053-21: 2016 / 2003 Electricity metering equipment (a. c.) - Particular requirements - Part 21: Static meters for active energy (classes 1 and 2)

3. IEC 62053-22: 2016 / 2003 Electricity metering equipment (a. c.) - Particular requirements - Part 23: Static meters for reactive energy (0,2S and 0,5S)

4. IEC 62053-23: 2016 / 2003 Electricity metering equipment (a. c.) - Particular requirements - Part 23: Static meters for reactive energy (classes 2 and 3)

5. IEC 61000-4-30:2015 Electromagnetic compatibility (EMC) - Part 4-30: Testing and measurement techniques - Power quality measurement methods

WAVIoT Cloud



Picture 1. Phobos info and serial number with active phases

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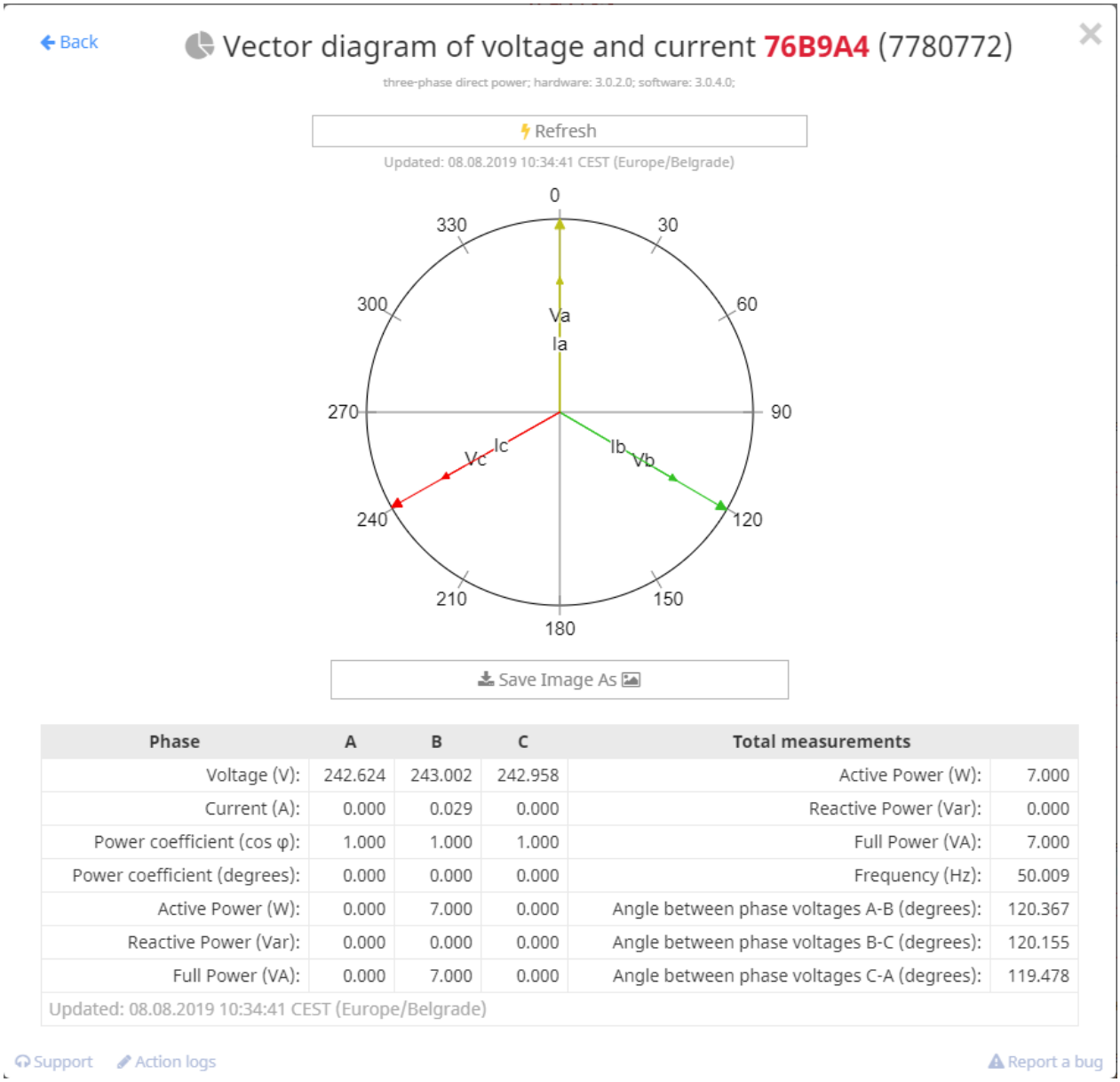
08.2019 | By hours | By days | By months | Period | Interpolation

A⁻ T1 Positive active energy in tariff T1

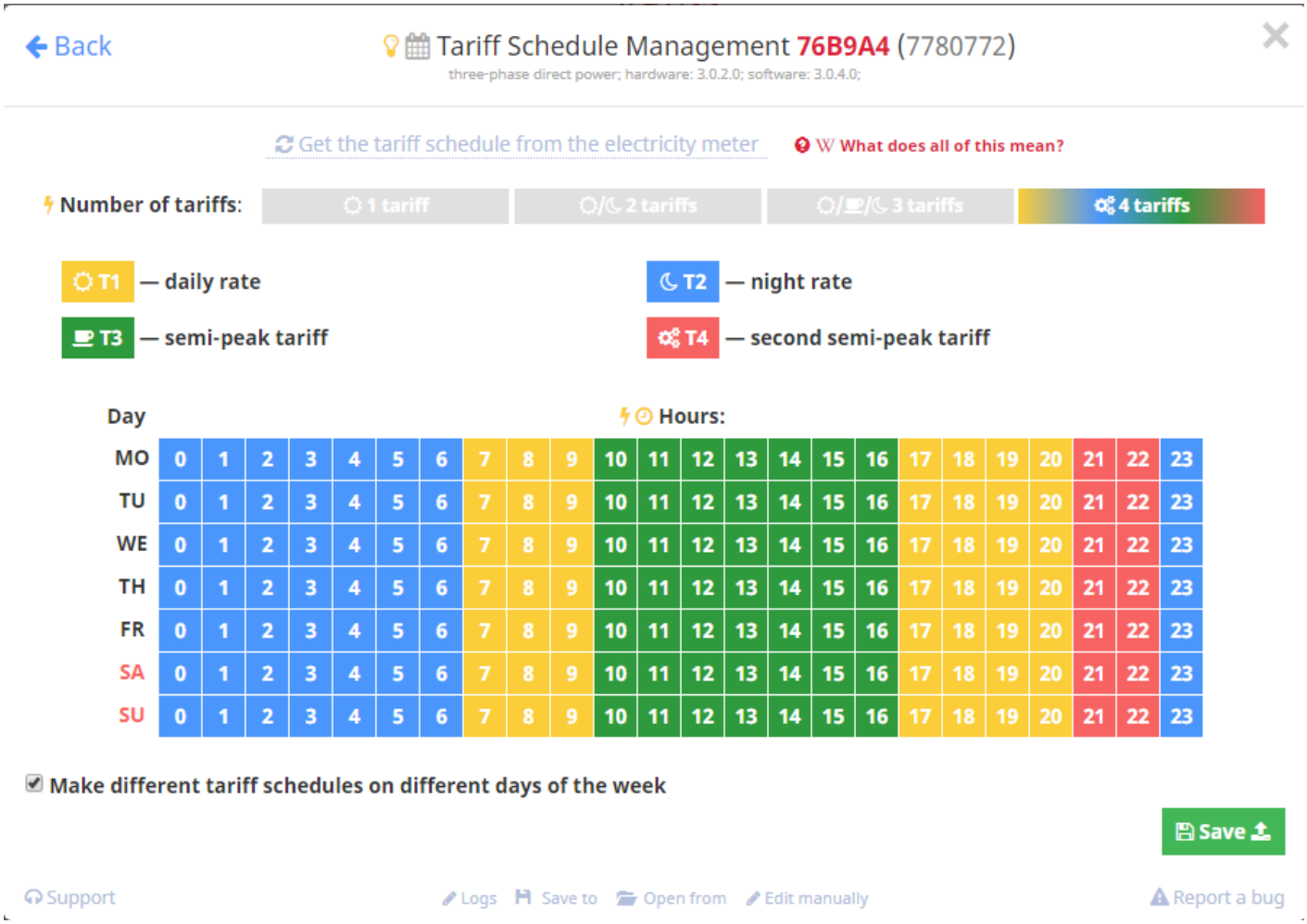
OBIS code: 1.0.1.8.1.255 (0100010801FF)

Period	Readings for period		
	Begins, kW·h	Consumption, kW·h	Ends, kW·h
01.08.2019 Thursday	1 299,170	0,709	1 299,879
02.08.2019 Friday	1 299,879	0,700	1 300,579
03.08.2019 Saturday	1 300,579	0,633	1 301,212
04.08.2019 Sunday	1 301,212	0,775	1 301,987
05.08.2019 Monday	1 301,987	0,228	1 302,215
06.08.2019 Tuesday	1 302,215	0,752	1 302,967
07.08.2019 Wednesday	1 302,967	0,477	1 303,444
08.08.2019 Thursday	1 303,444	0,354	1 303,798
09.08.2019 Friday	1 303,798	0,581	1 304,379
10.08.2019 Saturday	1 304,379	0,983	1 305,362
11.08.2019 Sunday	1 305,362	0,834	1 306,196
12.08.2019 Monday	1 306,196	0,319	1 306,515
13.08.2019 Tuesday	1 306,515	0,859	1 307,374
14.08.2019 Wednesday	1 307,374	0,563	1 307,937
15.08.2019 Thursday	1 307,937	0,284	1 308,221
16.08.2019 Friday	1 308,221	0,339	1 308,560
17.08.2019	1 308.560	0.296	1 308.856

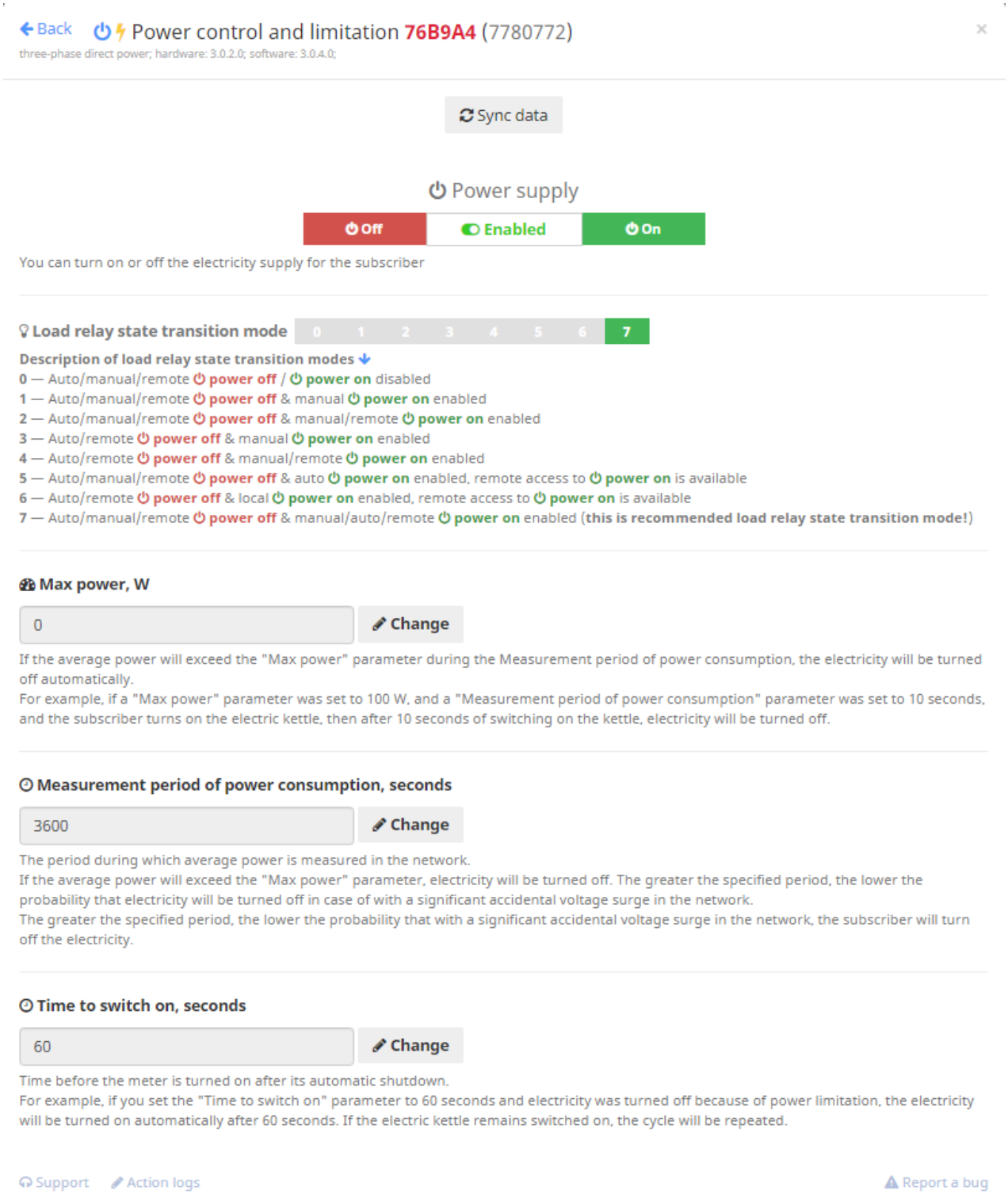
Picture 2. Readings for period



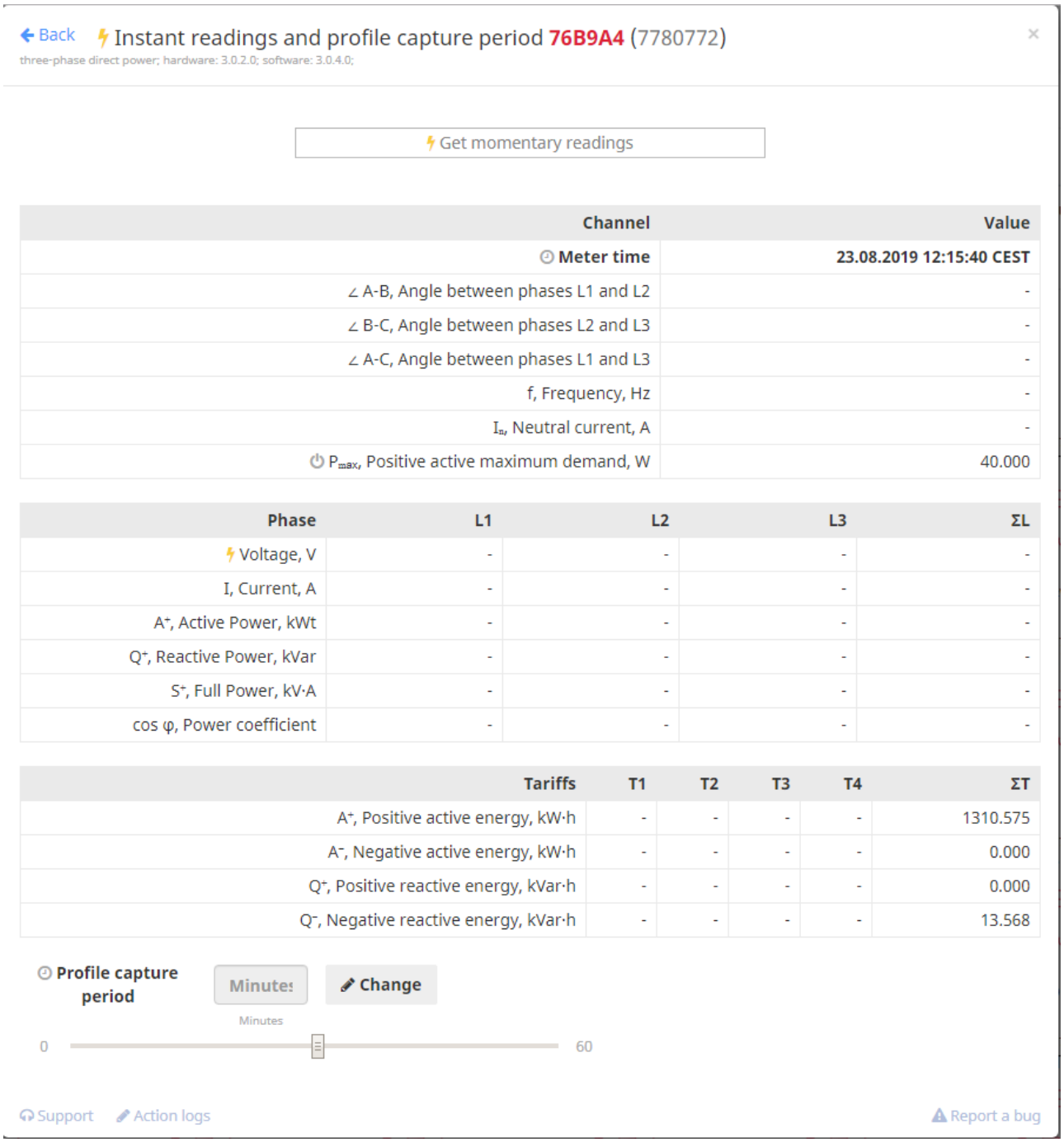
Picture 3. Vector diagram of voltage (when click on refresh it updates diagram instantly)



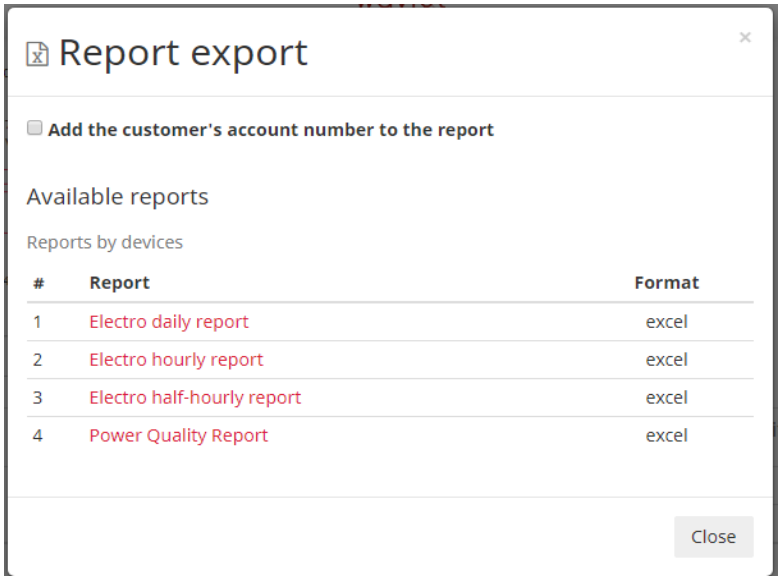
Picture 4. Tariff Schedule Management



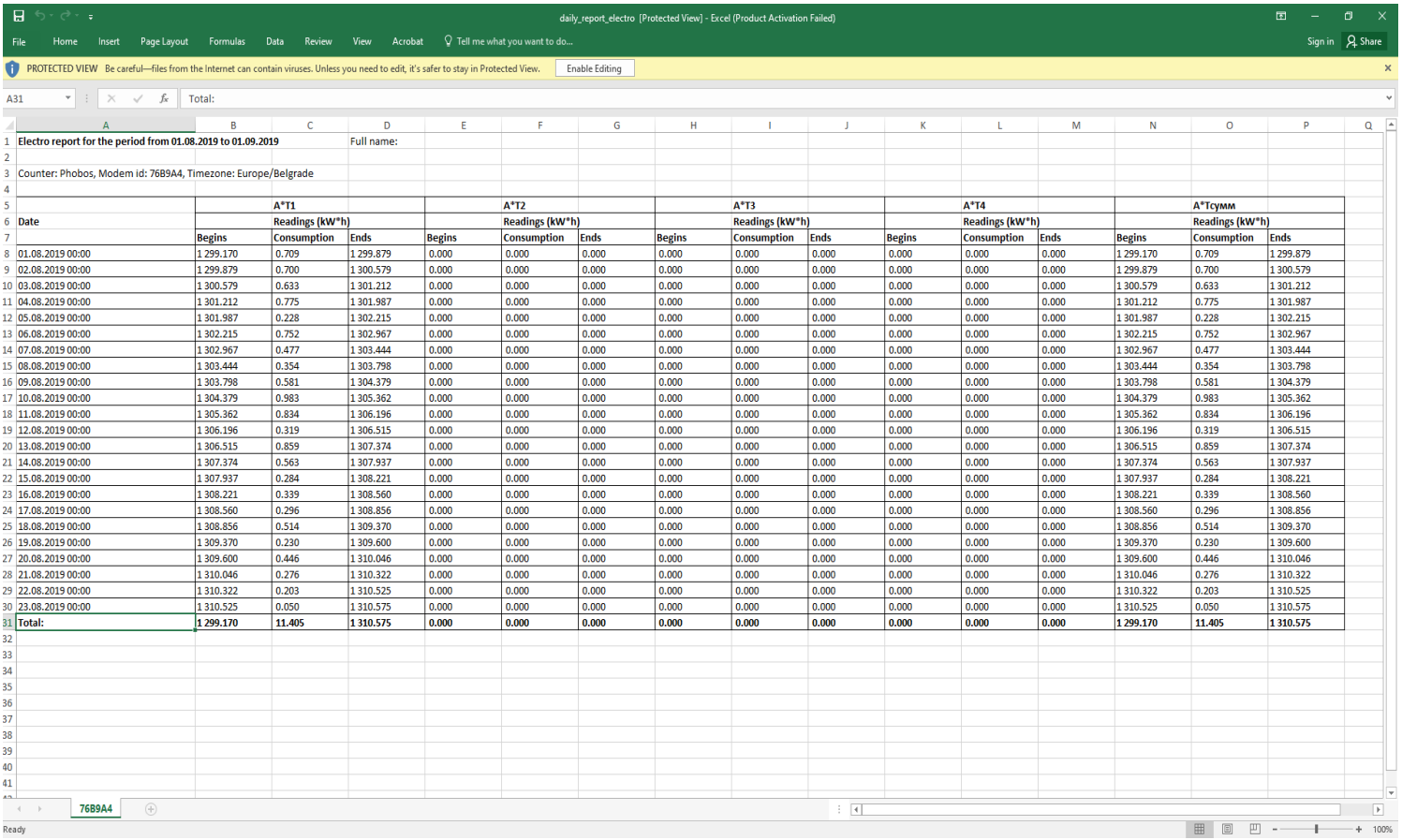
Picture 5. Power control (Turn of, turn on, set max power..)



Picture 6. Instant readings and profile capture period (Collect momentary readings and set profile capture period by your wish)



Picture 7. Report export



daily_report_electro [Protected View] - Excel (Product Activation Failed)

PROTECTED VIEW Be careful—files from the Internet can contain viruses. Unless you need to edit, it's safer to stay in Protected View. Enable Editing

Electro report for the period from 01.08.2019 to 01.09.2019 Full name:

Counter: Phobos, Modem id: 76B9A4, Timezone: Europe/Belgrade

Date	A*T1 Readings (kW*h)			A*T2 Readings (kW*h)			A*T3 Readings (kW*h)			A*T4 Readings (kW*h)			A*Тсумм Readings (kW*h)		
	Begins	Consumption	Ends	Begins	Consumption	Ends	Begins	Consumption	Ends	Begins	Consumption	Ends	Begins	Consumption	Ends
01.08.2019 00:00	1 299.170	0.709	1 299.879	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 299.170	0.709	1 299.879
02.08.2019 00:00	1 299.879	0.700	1 300.579	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 299.879	0.700	1 300.579
03.08.2019 00:00	1 300.579	0.633	1 301.212	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 300.579	0.633	1 301.212
04.08.2019 00:00	1 301.212	0.775	1 301.987	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 301.212	0.775	1 301.987
05.08.2019 00:00	1 301.987	0.228	1 302.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 301.987	0.228	1 302.215
06.08.2019 00:00	1 302.215	0.752	1 302.967	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 302.215	0.752	1 302.967
07.08.2019 00:00	1 302.967	0.477	1 303.444	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 302.967	0.477	1 303.444
08.08.2019 00:00	1 303.444	0.354	1 303.798	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 303.444	0.354	1 303.798
09.08.2019 00:00	1 303.798	0.581	1 304.379	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 303.798	0.581	1 304.379
10.08.2019 00:00	1 304.379	0.983	1 305.362	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 304.379	0.983	1 305.362
11.08.2019 00:00	1 305.362	0.834	1 306.196	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 305.362	0.834	1 306.196
12.08.2019 00:00	1 306.196	0.319	1 306.515	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 306.196	0.319	1 306.515
13.08.2019 00:00	1 306.515	0.859	1 307.374	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 306.515	0.859	1 307.374
14.08.2019 00:00	1 307.374	0.563	1 307.937	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 307.374	0.563	1 307.937
15.08.2019 00:00	1 307.937	0.284	1 308.221	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 307.937	0.284	1 308.221
16.08.2019 00:00	1 308.221	0.339	1 308.560	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 308.221	0.339	1 308.560
17.08.2019 00:00	1 308.560	0.296	1 308.856	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 308.560	0.296	1 308.856
18.08.2019 00:00	1 308.856	0.514	1 309.370	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 308.856	0.514	1 309.370
19.08.2019 00:00	1 309.370	0.230	1 309.600	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 309.370	0.230	1 309.600
20.08.2019 00:00	1 309.600	0.446	1 310.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 309.600	0.446	1 310.046
21.08.2019 00:00	1 310.046	0.276	1 310.322	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 310.046	0.276	1 310.322
22.08.2019 00:00	1 310.322	0.203	1 310.525	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 310.322	0.203	1 310.525
23.08.2019 00:00	1 310.525	0.050	1 310.575	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 310.525	0.050	1 310.575
Total:	**1 299.170**	**11.405**	**1 310.575**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**1 299.170**	**11.405**	**1 310.575**

76B9A4

Ready

Picture 8. Example of report export

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Tekući račun: RSD 285-2291000001126-85 | EUR 285-2291209900591-82 | USD 285-2291209900592-79