Eliot

A sensor for monitoring
electricity consumption and production
in households and small and medium-sized enterprises

- Monitor your electricity consumption and generation online.
- Compare the deposits you have paid with reality to keep your energy expenses under control. No more surprising invoices at the end of the billing period.
- Find out how much energy you consume in the course of a day, month or year, and compare instantaneous data with historical.
- Find out how your appliances affect your consumption and see your home's energy profile.

Features

Automatic readings
In intervals set by the user (15 min, 30 min, 60 min, ...)

Easy to install, powered by battery
Magnet attachment to the common types of electricity meters, no cables!

LPWAN wireless transmission
No SIM, wi-fi or Internet connection required, no data concentrators

Clear overview online
Accessible anytime, anywhere from your computer, tablet or mobile phone with cloud-based technology

Instant notifications
That the set limits have been exceeded, by e-mail or text messages

Data export, API
CSV export, easy integration into third-party applications and IoT portals thanks to the API

Manage energy smartly

Eliot provides all the information needed for efficient and responsible energy management. Go to: https://app.visionq.cz/index.php?language=en and click on Try Demo.

Data obtained from the electricity

Instantaneous data
Consumption in high and low tariff, or production from PV

Historical data
Data from a selected period, including display in CZK

Control over the sensor

Settings
Reading intervals, selection of information, etc.

Update
Software update

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Sensor versions: Eliot Classic vs. Eliot Pro

	Classic	Pro
LoRaWAN network	yes	no
NB-IoT network	yes	yes
Indication of correct installation	yes	yes
Measurement to Wh (3 decimal places for kWh)	yes	yes
Conversion of consumption to currency	yes	yes
Export of measured data (CSV, XLS)	yes	yes
Comparison charts	yes	yes
API available for free	yes	yes
Remote FW update over-the-air	yes*	yes
UTC based measuring intervals	no	yes
Accurate graphs according to UTC	no	yes
Local measurement backup	no	yes
Accurate battery status measurement	no	yes
100% measurement delivery guarantee	no	yes
Measuring of electricity production (FVE)	no	yes
External antenna on SMA connector	no	yes
Signed messages using Ed25519	no	yes

* Only for NB-IoT notwork

Technical Specification

Meter Communication protocol:	ČSN IEC 62056-21 (former IEC 1107), EDL-21 SML (Germany)
Supported LPWAN networks:	LoRaWAN, NB-IoT
Electricity meter port used:	Optical in compliance with ČSN IEC 62056-21
Attachment to the meter:	Magnetic ring (Neodym N35), optional velcro 3M Dual-Lock
Ambient temperature:	-20 .. 50 °C
Cover:	IP 20
Dimensions:	70 x 45 x 25 mm
Weight (including battery):	83 g
Batteries:	AA Saft LS 14500 LiSOCl2, 3,6V, 2,6 Ah, AA Tadiran SL-360/860
Battery life:	6–18 months depending on the reading frequency and on the local conditions of LPWAN networks
Antenna:	LoRaWAN: for 868 MHz band, NB-IoT: for LTE band B20
Approved:	Připojovací podmínky NN ČEZ Distribuce, 15.4. 2019

For more information visit: www.visionq.cz, use email: info@visionq.cz or call: +420 774 867 745.

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