

Remote IoT Energy Metering, Monitoring and Forecasting



Remote IoT based monitoring and forecasting of electricity and heating costs



Technical Features

- ✓ Remote metering and monitoring over a radio network: 2G/4G, NB-IoT or LoRa/LoRaWAN
- ✓ Works with existing and newly installed meters with pulse outputs, Modbus or mBus
- ✓ Real time data transmission and recording
- ✓ Data buffering for 24 hours in case of a network failure
- ✓ Works in real time on power or in low power mode on battery
- ✓ Battery life: 10 years

Solution description

ThingsLog's solution for remote monitoring and forecasting of energy costs is suitable for small to medium-sized enterprises with minimum initial investment and very short time for implementation. The solution implements meters and mobile data loggers in combination with a browser-based analysis and monitoring platform alongside a mobile application capable of tracking costs and receiving notifications.

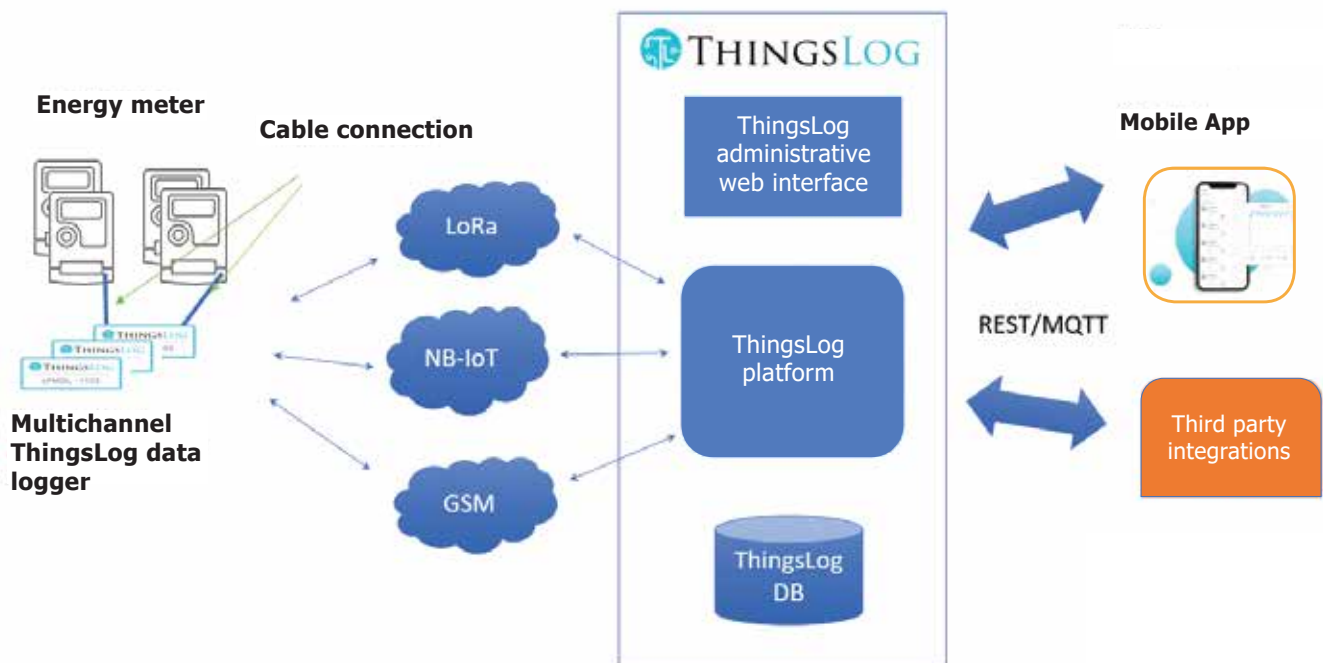
Suitable for:

- › Small and medium businesses
- › Manufacturers
- › Building owners

Benefits

- ✓ Keep track of your energy consumption
- ✓ Get instant insights and suggestions about it
- ✓ Plan and forecast your consumption
- ✓ Understand what needs to be optimized
- ✓ Map consumption to production
- ✓ Perform data driven decisions
- ✓ Save money and resources

How it works



Step 1: Connect a logger to the meter.

Step 2: The logger reads energy data either through a pulse output port, mBus or Modbus.

Step 3: Data is gathered by the logger and transmitted on regular intervals to the ThingsLog platform.

Step 4: The platform receives the data, analyzes it, and stores it in the database.

Step 5: Data is analyzed and consumption profile is created. If there is an event, a notification is sent.

Step 6: Customers review their data on the ThingsLog platform and get their notifications by the ThingsLog mobile app.

The ThingsLog Platform

ThingsLog platform is an IoT platform for remote monitoring of electrical and heating energy, water, gas, temperature/humidity level, pressure and others.



Consumption monitoring as a service



Measurement data management
of a given device / sensor



Device management and
configuration



Signal and battery level monitoring



Data visualization and analysis



REST API interface for easy integra-
tion with other platforms



Alarms and notifications

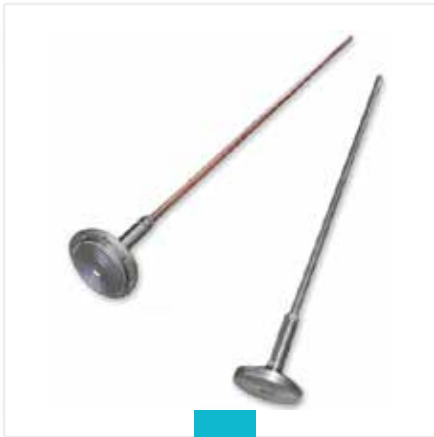


User-friendly interface and
application

Self documented REST API interface:
<https://iot.thingslog.com/swagger-ui.html>



Additional Services Upon Request



**Customized solutions based
on specific customer needs**



Professional services



**Third party system
integration**



Training



Device pre-provisioning

Remote monitoring and forecasting of electricity costs.

Ordering Codes

ENMON - Energy Monitoring (Monitoring electricity consumption)

ENMON-XXXX-YP-AAA-WWW-ZZ-B

XXXX (NETWORK TYPE)	DESCRIPTION
1101	2G, GSM (Logger with a SIM card provided by us)
1102	NB-IoT network logger
1103	LoRa network logger
YY	Type of observed point: Single-phase / three-phase
1P	Single-phase energy meter
3P	Three-phase energy meter
HP	Heat meter

AAAA – For electrical energy the Amperage of the switch, we will observe.

For heating energy use 0000.

Example:

040	40 A
080	80 A
100	100 A
200	200 A
300	300 A
400	400 A
600	600 A
1000	1000 A
0000	Heating energy

WWW – Power usage in kW

Example:

006	6 kW
024	24 kW
100	100 kW

ZZ - Type of energy you wish to monitor

AA	Active energy
RR	Reactive energy
AR	Active and Reactive energy
HE	Heating energy

B - An existing power meter to which we have to connect our loggers, or lack thereof a power meter (has to be installed)

0	A new meter has to be installed
1	An existing Modbus energy meter
2	An existing mBus energy meter
3	An existing pulse output energy meter

Example:

Business user - Monitoring the complete consumption of a store via 2G data logger on three-phase of 24.5 kW and a main panel switch of 150A, in addition to the installation of a new control energy meter.

ENMON-1101-3P-150-024-AA-3

Small manufacturer - monitoring the consumption of active and reactive energy of 25 machines located in 10 different electrical closets. Each machine has an 8kW motor and an 80A circuit breaker in the electrical panel.

The LoRa network (1103) has to be chosen due to a concentration of multiple points in a single location.

ENMON-1103-3P-080-008-AP-3

Office building - an energy monitoring solution is employed to justly distribute the bills. Each tenant has access to the monitoring system and control of the electricity costs.

Each office has a three-phase logger with 15kW power in an electrical closet with an 100A main switch. A pre-installed control electrical energy meter already exists.

ENMON-1103-3P-100-015-AP-0

Home user - monitoring the overall consumption of a single-phase apartment with an allocated power of 6 kW and a 25A main power switch.

ENMON-1101-1P-025-006-AA-1

Each client receives a complete package including:

A new control electricity meter or an optical pulse outlet for connecting to an existing electricity meter, a data logger, batteries, network service. Additionally, we provide access to a platform for storage, analysis and visualization of data via a browser-based and mobile solutions.

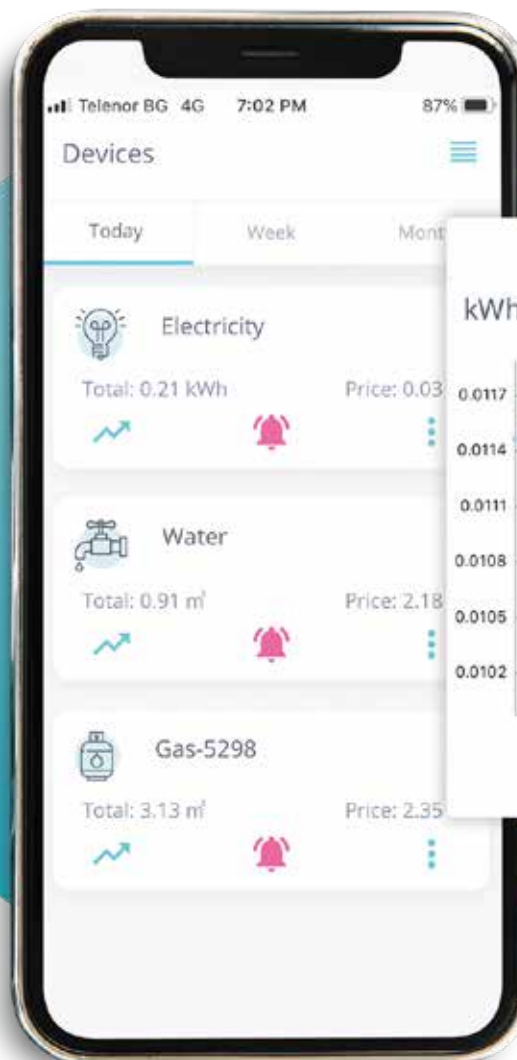
Moreover, we offer installation, staff training, and customizable reports and visualizations in relation to your business' specific needs.

ThingsLog Mobile Application

Your energy consumption is important to us!
Start tracking and forecasting your electricity
consumption now!



Get a modern solution for tracking and visualizing electricity consumption, as well as, receiving notifications on your mobile device.



How to Order



Step 1.

Review the brochure and try to formulate the correct order according to your specific needs and business case.



Step 2.

Send a photo of the meter/location where a meter has to be installed.



Step 3.

Place an order sales@thingslog.com