

Powersense

Energomonitor will provide you with a complete overview of your energy consumption and production.

The Energomonitor Powersense set measures the electricity consumption and production of the supply point by connecting to 1 or 3 phases.



Why choose Energomonitor

- ▶ **comprehensive information** about consumption, not only in MWh, but also the monetary cost monitoring
- ▶ **real time energy consumption, data saved every 90 seconds**, you can browse through the history anytime
- ▶ alerts in case of **emergency conditions**
- ▶ warnings about changes in **long-term conditions**
- ▶ weekly and monthly **e-mail reports**
- ▶ **watchdog** and inspection if everything is in order or as you expect in your household or company
- ▶ relevant **suggestions for potential economy drive**
- ▶ **the measured data is accessible anytime and from anywhere**, from any computer, tablet or mobile phone
- ▶ it is not necessary to have any new specific wires or data line installed, **Energomonitor uses your current infrastructure**

Energomonitor Optosense set contains:

- Energomonitor Homebase (with 230 V power supply)
- Energomonitor Transmitter
- Powersense Probe (1x or 3x)
- Ethernet cable
- All packed in nice paper box

Energomonitor Powersense set can be expanded by:

- **Temperature measuring** (Energomonitor Thermosense unit)
- **Optical measuring of electricity consumption** (Energomonitor Optosense set)
- **Gas consumption measuring** (Energomonitor Relaysense Gas set)
- **Water consumption measuring** (Energomonitor Relaysense Water set)



PLEASE, TAKE A LOOK
at the demo of the application on
app.energomonitor.cz



Technical details of the hardware

Energomonitor Powersense Probe



- The Powersense probe is a current transformer most frequently measuring on 1 or 3 phases.
- The probe measures values from the phases and gives them to the Transmitter which is connected with the probe by a cable.
- We deliver the probes in versions suitable for different kinds of supply points and switchboard.



clip small clamps small clip large

Energomonitor Powersense Transmitter



- The Transmitter is attached in the switchboard, collects the measured values from the probe and wirelessly sends the data to the Homebase every 6 seconds.
- Each Transmitter can be equipped with up to 3 Powersense probes. Only one transmitter is needed to measure 3 phases.
- The radio signal of the Transmitter can reach the Homebase up to 200 m distance (depending on local conditions).
- Transmitter is designed in high quality metal case with various types of antenna.

Energomonitor Homebase



- The Homebase continually receives the values measured by the Transmitters, which are paired with it, and sends this data to the Energomonitor cloud servers, where the data is processed and followingly visualized in the web application connection. The Homebase has to be connected to the internet via ethernet cable.
- One Homebase can accept data from 30 transmitters at the same time. This means that one unit is frequently sufficient to completely satisfy the needs of most of the supply points.

			PHYSICAL SIZE			
26×40×23 Ø 10 mm	55×60×30 Ø 12 mm	60×85×45 Ø 36 mm	45×92×29 mm (without antenna)		110×80×26 mm (without antenna)	
cable: 1 m						
			POWER SUPPLY			
—	—	—	2 × exchangeable AA alkaline battery 1.5 V		5V DC, 500 mA, USB-B	
			RADIO PROTOCOL			
—	—	—	proprietary protocol Chirp, working in 433 MHz band (868 MHz optionally)		proprietary protocol Chirp, working in 433 MHz band (868 MHz optionally)	
			INTERFACE			
CT output			3 × CT inputs		RJ-45 10/100 Mb/s, RS-232	
			RANGE OF METERING			
< 80 A 20 W–20 kW	< 300 A 0,2–72 kW		< 3 × 300 A		—	
			RESOLUTION OF METERING			
—	—	—	1 W		—	
			CONVERSION CONSTANT ADJUSTABLE			
—			190, 195, 200, 205, 210, 215, 220, 225, 230, 235, 240, 245, 250 V		—	
			CONSUMPTION			
—	—	—	> 2 years battery life time		2 W max.	
			WORKING TEMPERATURE			
from –20 °C to +60 °C (not wet)			from –20 °C to +60 °C (not wet)		from 0 °C to +60 °C (not wet)	
			TYPE OF ANTENNA			
—	—	—	SMA connector for external aerial		telescopic (433 MHz band) internal (868 MHz band)	