Knowatt
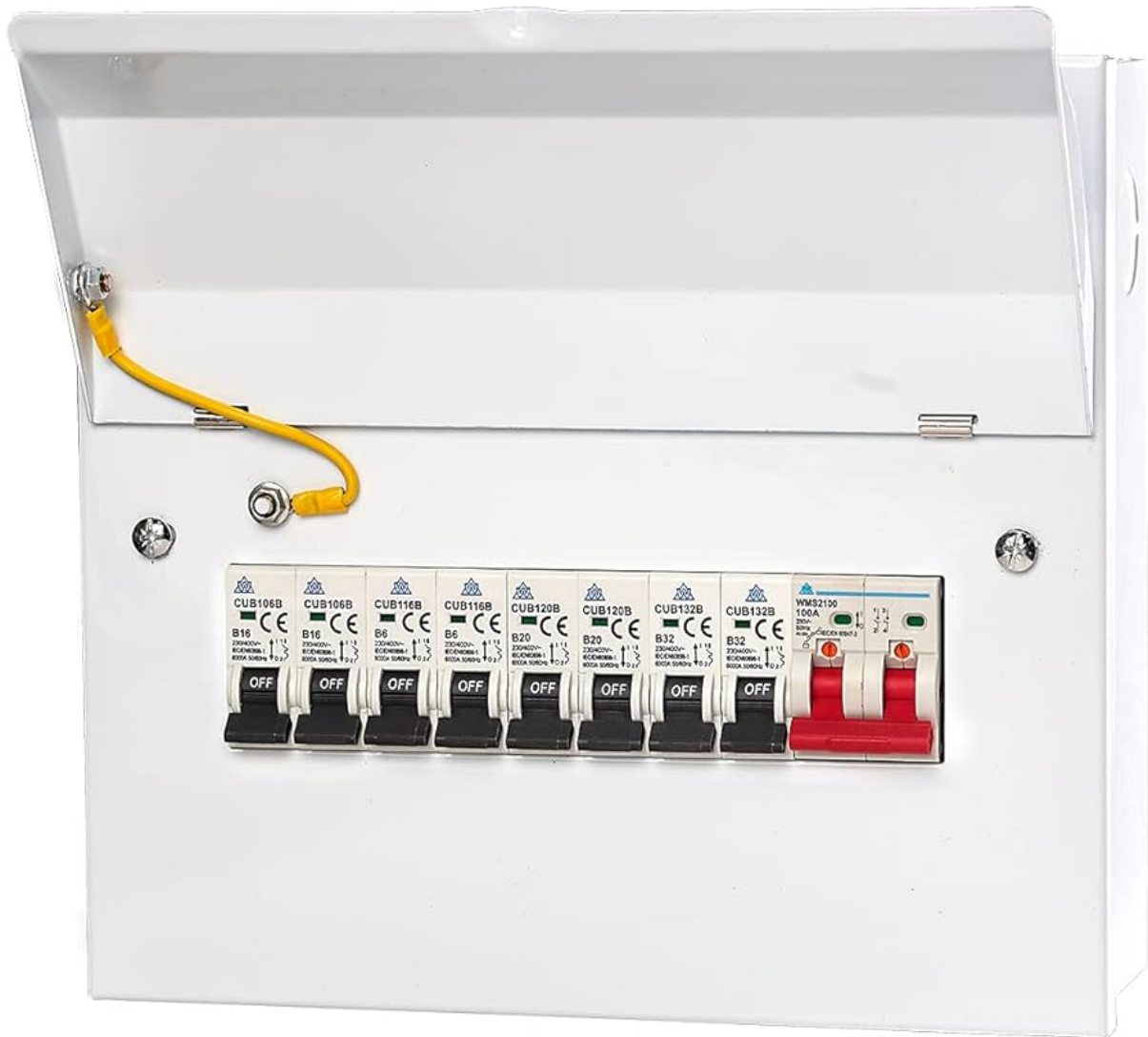
Knowatt Hedgehog (3 Domestic)
Domestic Utility Pickup - EVERY Circuit

Domestic Energy Monitoring - That's useful

PHONETICA

Knowatt

Features - For the User

- Report on the energy consumption and the cost associated for every circuit (max 16)
- Report on what appliances are currently running
- Estimate monthly bills based on past consumption
- Report on Solar Energy generation and the revenue associated
- Report on grid balance, showing overall net flow
- Give energy reports, detailing electricity, water and gas costs, and comparing to past bills.
- Provide advice to reduce energy consumption
- Identify appliances consuming energy at unexpected hours
- Compare providers and search for lower tariffs
- Intelligently (AI) learns from energy consumption and appliance use to create a household profile, providing a custom experience specific to the household

Features - For the Installer

- Completely contained inside the Consumer Unit
- LOW COST !!
- Perfect for upgrades or new builds, can also be retro-fitted.

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Knowatt

The Knowatt 06, the perfect unit for sub metering or smaller installations, sending aggregated, intermittent data.
The Knowatt06 an overall utilities 1/3phase sub-meter, Mains powered for Overall utility monitoring via the 3 CT inputs.
Picking up each phase's main incoming supply, for accurate TRUE, Apparent and Actual Power monitoring.
Utilising LoRa wireless technology, connecting, long range, low data rate, sensors to the Cloud and enabling real-time communication of data and analytics that can be utilised to enhance efficiency and productivity. Knowatt's LoRa Gateway is designed for fit and forget. designed for 24/7 operation for > 10 yr lifetime and guaranteed for 5 years.

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Knowatt

Accessing the information

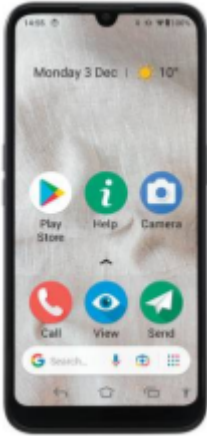### Web Access

Amazon Echo Show and similar devices

Maya

00:01

Knowatt

Smartphone

Knowatt

Give Energy a Voice

Solar Reports

About

Supplier

??   Appliance Report   *Need to find/create the report*

??   Kitchen Update   *Need to find/create the report*

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Knowatt

ACTIVE APPLIANCE

Sockets		8.24kWh / £2.8
Shower		2.12kWh / £0.72
Utility & Fridge		1.68kWh / £0.57
Lighting Upstairs		0.76kWh / £0.26
Kitchen Sockets		0.00kWh / £0

PHONETICA

Knowatt Hedgehog

Domestic Energy Monitoring

Technical Specification

Knowatt05 – 1 Phase

- 1 phase CT Class 0.1 Meter
- High Accuracy <1%
- Power (Whr) converted to KWh
- AC Voltage & frequency
- Brownout detection
- Spike detection
- RMS voltage (true)
- Real/Apparent/PF/Frequency
- Built into the Busbar of the consumer unit
- Temperature
- Contained within the Consumer Unit
- TRUE power-High resolution (0.001W)
- High accuracy synchronised, 24 BIT Sigma Delta A-Ds, sampling at 8kHz
- Worldwide application

Network

- LoraWan communications; long range, low powered IOT
- 868MHz (Europe)
- MQTT Via LoRawan protocol

- Requires LoraWan Gateway within 1km

    o Usually one per house

Mechanical

- Internal to the Consumer Unit

Environmental

- Operating Temperature; - 5'c ~ +55'c
- Storage Temperature; -20'c ~ +65'c
- Humidity; 20% - 90%

Safety

- CE Certified

Pickups

- Built into the Busbar

- Non intrusive, so if unit fails no interruption to supply

Unit Setup

- Easy setup - Automatic (QR Code)

Data types (pulse pickup)

- Electricity
- Extras using Knowatt02/04's
    o Water
    o Oil
    o Electricity
    o Gas

Guarantee

- Design life 10 yrs, Guaranteed 5 yrs