



Knowatt48

Disaggregated Utility Pickup

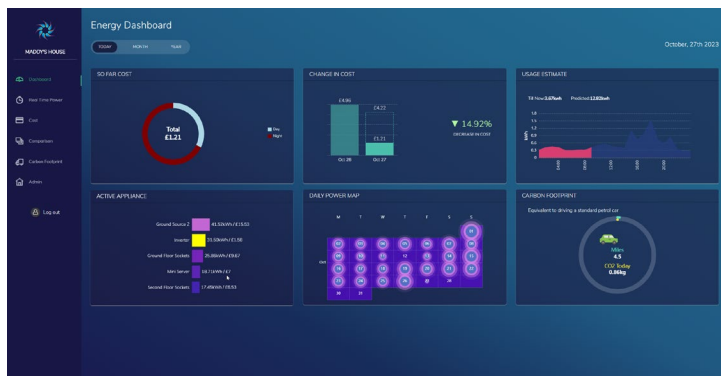


The Knowatt48 is designed to monitor individual circuits throughout industrial and domestic DBs/ CUs (Distribution/Consumer Units), depending on size requirements. Typically, units come in 24 or 48 circuit versions (**Knowatt24 / Knowatt48**).

3 Isolated pulsed inputs are also available on the **Knowatt48**, typically used to monitor water, electricity, gas meters.

State-of-the-Art Technology provides class 1 accuracy. Collecting, and Transmitting Live data at minute intervals provides our customers with unparalleled statistical information for complete system analysis & control. The Knowatt48 is the market leader in dis-aggregated¹ electrical power data collection on every continent. Edge² processing can reduce data overload.

Measures True Power on up to 48 Circuits



WWW
Ethernet

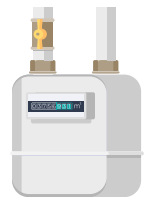


24/48 Circuits

1/3 Phases



Water Meter



Gas Meter



Electricity Meter

Figure 2 Where it fits - Block Diagram

¹Aggregate data is high-level data which is acquired by combining individual-level data. For instance, the output of an industry is an aggregate of the firms' individual outputs within that industry.

²Edge computing is a distributed computing paradigm that brings computation and data storage closer to the sources of data. This is expected to improve response times and save bandwidth.

Technical Specification



Knowatt

Knowatt48

- 3 phase Class 1 Meter
- Single or 3phase capability
- Data intervals down to 1 minute
- High Accuracy <1% temp. comp.
- Power (Whr) and KWh
- 48 x CTs – 6-200mm aperture
- Easy install - 6P6C RJ connections in groups of 3 for Input CTs
- TRUE power-High resolution (0.001W)
- High accuracy synchronised, 22 BIT Sigma Delta A-Ds, sampling at 8kHz
- Universal input 90–264 VAC, 47–63Hz
- 3 Isolated pulse inputs
- Current Measurement Range: 0.01A to 3kA (dependent on CT)

Network

- Ethernet connection on device to Internet
- TCP/IP – standard
- MQTT – Option
- Wireless capabilities option

Electrical

- 1, 2 or 3 phase – Mains powered
- <0.5W consumption

Mechanical

- Dimensions (W x H x D) 237 x 195 x 47mm
- Weight; 0.5kg
- Colour; Grey

Environmental

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

Safety

- CE Certified
- EMC Certified

Pickups

- Variable Clip-on or Solid core CT's 6mm – 200mm available (32A – 10,000A)

SD Card

- Unit Setup
- Backup data storage

Installation

- Wall or Desk mount
- DIN rail available

Data types

- Measures True Power each cct.
- Voltage – each phase
- Frequency,
- Apparent power, PF etc. options - Current, Power Factor
- Dis-aggregated data, each channel is separate and high resolution 000.001W

Edge processing

- Local processing power (Ras Pi Pico)
- We can adopt the customers EDGE
- Alternatively, we can offer ours

Lifetime

- Designed life 10 years.
- Guaranteed 2 yrs

For more information
www.knowatt.com