

www.econtrols.co.uk

Technical overview

kWh ENERGY METERS

Accuracy

Approved and certified by The Office of Gas & Electricity Markets [Ofgem] to meet the requirements of the Measuring Instruments Directive [MID]

Quality

All meters are manufactured under a quality system approved to BS ISO 9001: 2000

For a detailed specification document on this product please contact Energy Controls.

Energy Controls reserve the right to change specification without notice.

Reference Standards

BS EN62053-21: 2003
Static Meters for active energy. [Classes 1 & 2]

BS EN62052-11: 2003
Alternating current static watt-hour meters for active energy. [Classes 1 & 2]

IEC62056-21: 2002
Data Exchange for Meter Reading, Tariff and Load Control. Direct Local Exchange

SI1566: 1998
The Meters [Certification] Regulations 1998

2007-Measuring Instruments Directive



Energy Controls Metering Ltd
PO Box 1141 Stratford-upon-Avon, CV37 1XN

Tel: 0845 230 4535
Fax: 0845 230 4113
Email: sales@econtrols.co.uk
Web: www.econtrols.co.uk

Suppliers of
WORLD CLASS
Meters & Metering
SYSTEMS



kWh ENERGY meters *Range*

Immensely accurate Single Phase and Three Phase kWh meters incorporating the very latest technology approved to Utility Company standards



METERING
Measuring
& Managing **RESOURCES**

INDUSTRIAL & COMMERCIAL

THE MOST FUNCTIONAL & **COST EFFECTIVE** METERS IN THE WORLD



The Energy Controls kWh Meter range is probably the most functional yet cost effective range of meters available in the world today. Available in both Single Phase and Three Phase formats, each meter has been developed to meet the ever increasing demands of the Electricity Supply Companies.

The kWh Energy Meter range is manufactured using the very latest metering technology providing a safe investment for the future. Our kWh energy meters offer comprehensive functionality, maximum flexibility and unique modularity within one meter family.

SINGLE PHASE kWh ENERGY METER



STANDARD FEATURES

- Pulsed Output [optional]
- LCD Display
- Fraud Protection
- Import/export energy register
- Multi-rate version [optional]
- Compact design
- Optical Port for Programming & Data Acquisition
- 20 years Certification Life

PROGRAMMING

All of our kWh meters have an optical interface port incorporated in the front fascia which complies with IEC 1107 (FLAG). Using a suitable probe with either a hand-held PDA or laptop PC it is possible to download energy consumption data for analysis away from site. Other parameters such as pulsed output values can also be adjusted.



DATA COLLECTION

The kWh Energy Meters range can be supplied with an optional auxiliary pulsed output. The volt-free terminal connections can be linked via cable to industry standard Data Collectors such as BMS systems; this is a simple and cost-effective solution for creating a hard-wired remote metering system. Although the meters are factory set to provide a fixed pulse width and duration, this can be adjusted to meet a customer's specific requirements.

IMPORT/EXPORT ENERGY

Each kWh meter is capable of measuring energy flow in both directions. For this reason, the meter can be specified to display both import & export energy registers. This feature is especially useful for consumers who are looking to generate their own power in order to take advantage of new environmental energy saving initiatives.

THREE PHASE kWh ENERGY METERS



STANDARD FEATURES

- Pulsed Output [optional]
- Active & Reactive Energy Measurement
- Large LCD Display
- Display buttons for local interrogation
- Multi-rate version [optional]
- Real Time Clock with Power Reserve
- RS232/485 connectivity
- Import/export energy register

DIRECT CONNECTION OR CTs?

The Three Phase Energy Meter can be supplied as a direct connected product rated 20-120Amps or with current transformers where larger loads are to be measured. The ZMD CT operated meter can be pre-programmed to suit CT ratios of any size.

'Plug & Play' MODULARITY

Our ZMD Three Phase CT meter is a fully programmable modular product allowing customers to simply plug in a communications module at any time after installation. Different variants of comms. module are available to suit customer specific requirements such as:- RS232/485, PSTN, GSM & Ethernet. This flexible modularity allows customers to easily convert their ZMD meter into a fully operational SMART comms. meter in order to gain instant remote access to valuable meter reading data via the internet.

Other features include:-

- Configurable Maximum Demand function
- 'Plug & Play' communications module
- Access to meter readings via the internet
- Inputs for connection to Water & Gas meters

