Smart AMR

MID approved Automatic Metering Reading for Micro-Gen, Feed In Tariff and Sub-metering applications

Metering

⇒ MID approved

⇒ Measures Import and Export, Active and Reactive Energy

⇒ Power Quality Information - Volts, Current, Power etc.

⇒ GSM Signal Strength Display

⇒ Dual circuit option for PPA

⇒ 30 minute profile data.

GSM Communications

⇒ Optimised Internal Antenna

⇒ O2, Vodafone, Orange/Tmobile...

⇒ External Antenna option, where required

⇒ Simple SIM Swap without need for de-energising mains supply

⇒ OTA upgradable

Features

Designed specifically for the collection of micro-generation metering data, EMGSM1 provides remote collection of meter readings especially generation metering of wind, solar and any other renewable energy installations. The meter is of modular construction and allows a range of communication modules to be fitted to allow for future developments in remote metering.

The meter is a fully MID approved device and can provide functionality over and above that required for generation metering making it suitable for many other applications. Additional functionality includes Time-of-Use Rate Switching, Power Quality Recording, Active (kWh) and Reactive (kvarh) energy measurement across both import and export.

The overall solution has been designed to minimise installation time and reduce the need for return maintenance visits. An indication of the GSM signal strength is provided on the meter display and in the cases where a network resilient SIM is fitted, the number of available networks is provided. This single display allows the installer to leave site confident that the installation is fully operational with a robust communication link.

SIM Module

The SIM is installed ready for use thus saving time and effort on site. SIM exchange is simple via a holder fitted to the underside of the module. A simple slid in action inserts and removes the SIM. Sims are supplied roam between O2, Vodafone and Orange/Tmobile networks for optimum coverage in all areas.

Meter Technical Data

Electrical
Voltage Nominal voltage   220V—240V
Maximum   276V
Voltage withstand   415V continuously
Frequency Nominal frequency   50Hz
Frequency variation ± 5%
Current Basic current (Iref) 5, 10, 15 and 20A
Maximum (Imax) 100A

Metrology
Accuracy   Active energy Class B, to EN 50470 1-3
Reactive energy Class 2, to IEC 62053 –23
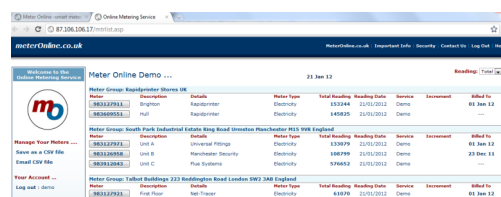Meets the essential requirements of the Measuring Instruments Directive (MID) 2004/22/EC

Environmental
Temperature Range -25°C to +55°C
Ingress protection IP52, to BS EN 60529
Meters are intended for installation in a in a class E2 electromagnetic environment and Class M1 Mechanical Environment according to 2004/22/EC Directive

Physical
Terminal arrangement BS 7856
Main Terminal size   8.2 mm diameter
Terminal Construction Solid brass

Compatible with www.meteronline.co.uk

AMR service, remote readings for a single subscription with simple on line registration

⇒ One subscription covers the SIM account and data handling
⇒ Self registration of meters using meter number and security code
⇒ Accounts for multiple or single meters
⇒ Meter groups within accounts (buildings, projects etc)
⇒ Database of meter information – location FIT reference etc
⇒ Spreadsheet view listing all readings
⇒ Automatic data export
⇒ FIT Claim Report—Good Energy format
⇒ Individual meter dashboard displays with readings and various profile graphs and energy analysis
⇒ Instantaneous readings from meter on demand
⇒ Automatic email alerts—Low Generation, Missed Readings
⇒ Energy generated display (can used as a public display on a project)
⇒ Read only account password and individual customer single meter access
⇒ Customised version with re-sellers colours, name, logo etc
⇒ Ongoing improvement policy since 2005