

GSM/GPRS Pulse Counting Utility Transmitter – r14605

Need to monitor your energy consumption but don't want the hassle of wired installation on site? Hanwell's new iSense energy range uses tried and tested GSM/GPRS mobile phone technology to monitor your energy usage remotely.

iSense energy will assist in diagnosing and eliminating areas of wasted energy and accurately report on costs and trends directly from the data it collects. The software allows up to eight different tariffs to be created allowing an accurate costing of energy use over periods of time and for particular pieces of equipment and/or areas of concern.

The r14605 unit is part of the iSense energy GSM/GPRS based range. All products in this range are truly stand-alone and are suitable for use in the most remote locations. The only limitation to use is the availability of a GSM signal. The r14605 unit is battery powered, which are user replaceable, with a life expectancy of around five years (depending on usage). The unit can be powered by an external 4.5 volt supply if required. Limitless sensors can be added to a system to cover a site of any size or physical make up.

Unlike many GSM/GPRS monitoring systems, using off-the-shelf GSM modems which often lose communication due to problems with the network, the iSense energy unit has an onboard micro controller acting as a watchdog for the modem. Should any problem with network connectivity be detected the GSM/GPRS module will automatically reset and re connected to the network avoiding costly trips to manually reset the unit.

The set-up is done via SMS messages allowing easy installation on site. Some setup is done via the internal USB interface (which can be done prior to installation) using the simple setup program, which is supplied free. A SIM card is required.



Clamp meter



Benefits

- Easy installation without any interference with mains
- Reduces energy costs
- Reduces carbon footprint
- Wireless communication for cost effective install
- Detailed analysis of usage and costs
- Compatible with existing Hanwell systems

Typical Applications

- Energy reduction
- Energy studies
- Energy monitoring

The RL4605 is a single channel pulse counting device with a built in GSM/GPRS module. The unit can be used to collect data from electricity, water, gas meters output (an isolation device may be required for gas meters) and Energy meters with a suitable pulse output providing accurate and reliable information about energy usage and cost. This data is transmitted, at user-defined intervals, to the Radiolog system where it is filed for analysis. The sensor cable entry into the case is via a cable gland and terminated into a terminal block allowing for ease of installation and making the unit suitable for use outdoors.

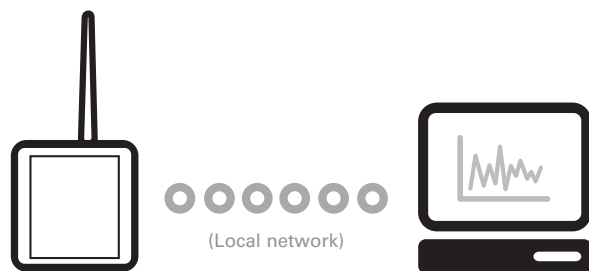
Power is provided from a battery pack consisting of 2 x Alkaline D cells. Replacement battery packs are available from Hanwell and can be easily fitted by the customer.

This ruggedised version of iSense energy comes in an IP 67 rated case and are suitable for use in harsh environments. The 4000 range has been designed to comply with the RoHS and WEEE EU directives, and carries the CE mark.

There are also 3 other product variants including:
r14607 – single channel pulse counting + sync, 2 way terminal block.
r14609 – dual channel pulse counting, 4 way terminal block.
r14611 – dual channel pulse counting + sync, 6 way terminal block.

Disclaimer

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Historical data can be downloaded via a USB cable directly to a local PC for analysis

Product Code r14605

Series r14000

Instruments

Dimensions: 100 x100 x 60 mm

Weight: 600 grams (including battery pack)

Power Supply: 2 x Alkaline D cell batteries

Battery Life: 5 years (depends on usage and configuration).

Case Materials: ABS & PC

N.B. Instrument operating range -20°C to +60°C in a non-condensing RH environment

Pulse Counting

Type: DC current transformers 0-5 volts

Resolution: 50mA

Accuracy: +/-2.5%

Minimum Measurement No. of channels:
1 (2 or 3 channel devices available)

Frequency: Maximum 15Hz

Pulse Mark/space: Minimum 25 msec.

Wetting Current: Between 1 to 2mA into a maximum impedance of 10 ohms.

Wetting Voltage: 3.0 volts.

Total Pulse Counts: Yes

Maximum total count: 1073741823 (30 bits)

Difference over period: Yes

Maximum Difference: 65535 (16 bits).

Period: 30 minutes (adjustable).

Period Sync: No (available on RL4607)

Error: +/-1 count

GSM/GPRS – Quad band module

GSM antenna connection is SMA. Knuckle antenna provided. SIM card required. The SIM socket is only visible when the case lid is removed.

Both units operate from a 2 x Alkaline D cell battery pack. Battery pack can be purchased from Hanwell and can be fitted by customer. Battery life at least 5 years (one SMS a day i.e. 30 minute pulse count).

