



# RF Pulse Counting Utility Transmitter – rl4604

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 Hanwell radio technology to monitor your energy usage remotely through point-to-point radio (PTP).

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.

This fast and reliable data transfer will allow automatic archiving of data onto a server. This can be done in two ways; though a LAN enabled retrieving base station or a receiving point with a direct USB PC connection. Both enable live data views to be available through compatible windows based software Radiolog. Limitless sensors can be added to a system to cover a site of any size or physical make up.

The rl4604 is a single channel pulse counting device with a built in RFTransmitter. 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. Each 4000 radio transmitter has enough internal memory to store up to 100,000 readings and is in fact continually logging. 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: rl4606 – single channel pulse counting + sync channel, 2 way terminal block

rl4608 – dual channel pulse counting, 4 way terminal block rl4610 – dual channel pulse counting + sync channel, 6 way terminal block



## 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** 





# Measurement, Control, and Datalogging Solutions

Product Code rl4604-xxx-xxx\*

Series rl4000

#### Instruments

Dimensions: 100 x 100 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

Memory Capacity: 100,000 readings

## **Pulse Counting**

Type: Volt free contacts or opto isolated (must be

wired correctly)

No. of Channels: 1, 2 or 3 channel devices available)

Frequency: Maximum 15Hz

Pulse Mark/space: Minimum 25msec

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 rl4606)

Error:+/-1 count

Please note: \* indicates the frequency

# Radio

\*Radio Frequency: 434.075MHz, 433.920MHz (fixed) 433.875 – 434.650MHz in 25KHz increments (synthesised)

Radio Power: 10 mW

Radio Range: 3 km over open ground



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



#### Disclaime

The information contained herein is believed to be reliable. Hanwell Instruments Ltd is not responsible for any incorrect or incomplete information on this datasheet and the information or product may be changed without notice. Customers should obtain and verify the latest relevant information before placing orders for Hanwell products.





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