Pulse counter

Wireless datalogger for the count of pulses generated by energy meters, litre-counters, etc. Free installation in any position. Excellent radio coverage and autonomy.

Suitable to monitor:

- Electrical consumptions
- Water consumption
- Gas consumption
- Generic counts

Main features

- Can be installed in any position
- Rugged and impact resistant case
- IP65
- Maximum count frequency: 40Hz
- Up to 7 years of autonomy

General technical specifications

Power supply	8.5Ah - 3.6V type "C" lithium internal battery (*BAT2*)
Battery life (*)	Up to 7 years *(samples every 60 minutes and radio signal quality at least sufficient)*
Measures acquired *(4 input channels)*	Pulses from clean contact or open collector configurable as: • Active electric energy [*KWh*] • Reactive electric energy [*Kvarh*] • Apparent electric energy [*Kvah*] • Thermal energy [*KWh*] • Fluid volume [*l*] • Generic pulses • Generic pulses with scalable cumulative count *Compatible with energy meters with pulse digital outputs (open collector, digital output)*
Sampling interval *(*)*	Selectable from one minute to 24 hours *(60 minutes default)*
Datalogger capacity	64,000 samples (*for each channel*)
Working temperature	• Operative: -30°C ÷ +60°C • Warehousing: -40°C ÷ +70°C
Radio frequency	ISM 868MHz
Radio coverage	Up to 15Km in line of sight *(can be extended using WLRE battery powered repeaters)*
Sealing	IP65
Dimensions	90x120x50mm
Weight	350g
Case material	ABS
Mounting	Fix on 4 points
Connections	Wireless, USB

Pulse count

Connection	Internal clamp terminal block
Transducer input	Cable gland Ø from 0 to 4.5mm
Maximum count frequency	40Hz with pulse time at 10msec
Count weight	Selectable via management software

The **WLRD12-4DI** wireless datalogger is made to count clean contact or open collector pulses acquired from energy meters, litre-counters, etc. outputs.

Counting is continuously performed on input channels and is partially considered on the configurable sampling period. In case, counting can be set as aggregate and scalable.

Data are wireless transmitted and internally stored.

The radio module High Reliability (*unique 868MHz radio technology. implementing frequency hopping on 20 channels*) based on **WINECAP™ LoRa®** protocol (***L****ong* ***R****ange*) provides an excellent radio range (***up to 15Km on sight***), low battery consumption and the certainty of data recovery in any situation (*black out/ signal obstacles*).

With a backup memory onboard may store the last 128,000 samples per channel even if the wireless link is down. Samples can be downloaded using a USB connection.

Using the configuration software, the sampling interval may be set and two thresholds per channel can be activated.

May be interfaced with all the **gateways** of WLRG product line.

If necessary, radio coverage may be extended up to 16 times using **WLRE enhancers** (*battery powered repeaters with battery life up to 7 years*) between the datalogger and the **gateway**.

The features shown may be subject to change without notice.