




# WSD12-4DI

Wireless Smart Datalogger

Pulse Counter



## Technical Information

<b>Power supply</b>	8.5Ah - 3.6V type "C" lithium internal battery
<b>Battery life (*)</b>	Up to 7 years <i>(samples every 60 minutes and radio signal quality at least sufficient)</i>
<b>Measures acquired (4 input channels)</b>	Pulses from clean contact or open collector configurable as: <ul style="list-style-type: none"> <li>• Active electric energy [kWh]</li> <li>• Reactive electric energy [kvarh]</li> <li>• Apparent electric energy [Kvah]</li> <li>• Thermal energy [kWh]</li> <li>• Fluid volume [l]</li> <li>• Generic pulses</li> <li>• Generic pulses with scalable aggregate count</li> </ul> <i>Compatible with any digital energy meter with pulse output.</i>
<b>Sampling interval (*)</b>	Selectable from one minute to 24 hours <i>(60 minutes default)</i>
<b>Datalogger capacity</b>	64,000 samples <i>(for each channel)</i>
<b>Working temperature</b>	<ul style="list-style-type: none"> <li>• Operative: -30°C ÷ +60°C</li> <li>• Warehousing: -40°C ÷ +70°C</li> </ul>
<b>Radio frequency</b>	ISM 868MHz
<b>Radio coverage</b> 	Up to 6Km in line of sight <i>(can be extended using <a href="#">WR12</a> battery powered repeaters)</i>
<b>Sealing</b>	IP65
<b>Dimensions</b>	90 x 120 x 50mm
<b>Weight</b>	350g
<b>Case material</b>	ABS
<b>Mounting</b>	Fix on 4 points
<b>Connections</b>	Wireless/USB
<b>Cable external diameter</b>	4.7mm maximum
<b>Copper wire section</b>	0.05 ÷ 2.5mm <sup>2</sup> / ÷ 14 AWG
<b>Optional accessories</b>	<ul style="list-style-type: none"> <li>• Energy meters</li> <li>• Rogowski coils</li> <li>• Open/closed TA <i>(current transformers)</i></li> <li>• POD counter pulse acquisition interface (<a href="#">EXP2PUL</a>)</li> </ul>



### Wireless Smart Datalogger.

The **WSD12-4DI** is a **datalogger** with four input channels to acquire pulses from clean contacts or open-collector, from energy meters, fluid meters, etc. inputs, with storage functionality of samples acquired.

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 11 channels)* based on **WINECAP™ LuPo** protocol *(Long Range)* provides an excellent radio range, 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 64,000 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 **basestations** of [MWDG](#) product line
- all the **basestations** of [MWLI](#) product line

If necessary, radio coverage may be extended up to 16 times using [WR12 repeaters](#) *(battery powered repeaters with battery life up to 7 years)* between the datalogger and the **basestation**.

### Pulse inputs

<b>Connection</b>	Internal clamping screw terminal block
<b>Transducer input</b>	From 0 to 4.5mm Ø gland
<b>Count maximum frequency</b>	40Hz with pulse time set to 10msec
<b>Count weight</b>	Selectable using management software

\* battery life may be influenced by fieldwork conditions, sampling interval and system configuration. - refer to User Manual.

The features shown may be subject to change without notice.

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