

### Thermal Energy



## Technical Information \*\*

Danier annah.	O. F.A.b. 2. CV. to use "C" lithium intermed hetters.	
Power supply	8.5Ah - 3.6V type "C" lithium internal battery	
Battery life (*)	Up to 5 years (samples every 10 minutes and radio signal quality at least sufficient)	
Measures acquired (4 input channels)	Pulses from clean contact or "open collector":  • CH1: Thermal Energy  • CH2: Volume  • CH3/CH4: Heat-transfer fluid temperature (Compatible with any energy meter with pulse digital output)	
Sampling interval (*)	Selectable from one minute to 24 hours (10 minutes default)	
Datalogger capacity	64,000 samples (for each channel)	
Working temperature	<ul> <li>Operative: -30°C ÷ +60°C</li> <li>Warehousing: -40°C ÷ +70°C</li> </ul>	
Radio frequency	ISM 868MHz	
Radio coverage	Up to 6Km in line of sight (can be extended using WR12 battery powered repeaters)	
Sealing	IP65	
Dimensions	90x120x50mm:	
Weight	350g	
Case material	ABS	
Mounting	Fix on 4 points	
Connections	Wireless, USB	
Cable external diameter	4.7mm maximum	
Copper wire section	0.05 ÷ 2.5mm² / ÷ 14 AWG	

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Weight Counting	Selectable on board:	
	CH1 (KWh)	CH2 (I)
	1	10
	10	100
	100	1.000
	1.000	1.000

### NTC10KΩ BETA 3435 inputs

Transducer type	NTC10KΩ BETA 3435 (2 wires)
Measure range	-50°C ÷ +105°C
Measure accuracy	± 0.5°C @ 40°C
Measure resolution	0.01°C
Connection	Internal terminal block
Sensor input	From 0 to 4.5mm Ø cable clamp



#### Wireless Smart Datalogger.

The **WSD12-EVTT** is a datalogger with 2 clean contact or "open collector" inputs capable to count pulses coming from a thermal energy meter (*energy and volume*).

Channels 3 and 4 are equipped with contact NTC10K $\Omega$  BETA 3435 temperature sensors to acquire the heat-transfer fluid temperature (flow and return).

All channels are provided with storage functionality of samples acquired.

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 <u>MWDG</u> product line
- all the **basestations** of MWLI product line

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

The features shown may be subject to change without notice.





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

<sup>\*\*</sup> Available with ACCREDIA calibration certificate or manufacturer certificate .