

# NSnappy® Wash LWEU-N

## Dishwasher transmitter

**The wireless NSnappy® Wash is designed for the measurement of the temperature profiles of dishwashers.**

The NSnappy® Wash transmitter is placed in the dishwasher with the dishes to be washed. Wash measures the temperature of the sprayed water on the dishes for the entire washing process. The device measures water temperature on the surface of the dishes; not the temperature of the water in the dishwasher reservoirs. The data is transmitted to the NSnappy® service over a LoRaWAN radio connection immediately after the washing is over.

The NSnappy® service stores an event for each washing session, and additional details can be added to it. By monitoring the development of washing events, you can anticipate the maintenance and adjustment needs of the dishwasher.

In normal use, NSnappy® Wash operates on the internal battery for five years. The measuring device comes with the NSure continuous warranty for IoT measuring devices.



## Applications



Commercial kitchens



Industry

## Product highlights

- Automates the temperature monitoring of dishwashing
- Extremely quick and easy to use – the measuring device is placed with the dishes to be washed
- Does not require fixed installation inside the dishwasher
- Measures the temperature of the water sprayed on the surface of the dishes
- Trends and reports of the washing events are available via the NSnappy® service



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### Environment

<b>Storage conditions</b>	-40...+40 °C, stationary, relative humidity 5-95%, non-condensing
<b>Operating conditions</b>	0...+90 °C, during max 10 min wash cycle
<b>Protection class</b>	IP68
<b>Enclosure material</b>	PC+ABS

### Dimensions

<b>Dimensions</b>	107mm x 68mm x 27mm
<b>Weight</b>	0.2 kg

### Temperature measurement

<b>Sensor</b>	Pt1000 Class B
<b>Measuring interval</b>	1s, only max value from 5s period is transmitted
<b>Measuring range</b>	-30...+90 °C
<b>Accuracy</b>	±1°C within +30...+90°C

### Radio connection

<b>Description</b>	LoRaWAN standard, EU 868 MHz frequency range
<b>Transmitter module</b>	Murata ABZ-093 LoRaWAN modem
<b>Antenna</b>	Internal
<b>Compatibility</b>	The device that uses a LoRaWAN radio connection requires an NSnappy® Hub LoRaWAN base station to function
<b>Frequency</b>	863-870 MHz (LoRaWAN 1.0.2 EU band)
<b>Power</b>	Max +14 dBm E.R.P.
<b>Range</b>	Depends on environment, indoors: in good conditions up to hundreds of meters, outdoors: line-of-sight up to 10 km

### Power supply

<b>Type</b>	3.6V Lithium Thionyl battery pack (3 x AA size)
<b>Battery life</b>	5 years with 20 min usage per day