

# NanoSense

## Datasheet Data logger / Gateway EnOcean & Modbus IP

**DRAFT**



Version	Date	Auteur	
V0	28/10/2019	Allan Cantin	Version initiale
V1	30/10/2019	O Martimort	Mise à jour

The NanoSense Data Logger / Gateway allows to locally store data from the entire range of IAQ EnOcean or Modbus probes and convert them into explicit data for sending over Ethernet or Wi-Fi to databases located on remote servers.

Compatible NanoSense probes are:

- E4000
- E4000NG
- P4000
- P4000NG
- E5000
- EP5000
- QAA-E

In addition to storing data locally, this gateway allows the data to be rendered in graphical (historical) form including the physiological effects of Air Quality thanks to the integrated Smart QAI algorithm.

It is therefore possible to have historical data and physiological effects without using external databases. (Wi-Fi access or Ethernet, BLE access for smartphone under study)

By sending data to remote servers, remote data history and physiological effects are available, as well as additional data and a more appropriate graphical interface in addition to secure archiving.

Locally recorded data can be saved to a USB key.

The Wi-Fi gateway can be disabled (schools, nurseries.)

Setting the WIFI is facilitated by a "WIFI station" mode that allows easy connection.

The firmware of this gateway consists of a Jeedom core and a peripheral layer developed by NanoSense.

The peripheral layer is not dependent on the Jeedom structure which allows each to evolve freely without compromising their respective operations.

Summary of functions and allocations:

Functionalities	Jeedom core	NanoSense Firmware
<b>Graph of probe data</b>	Graphs over a given period of time	Charts associated with physiological effects
<b>EnOcean Equipment Profile (EEP) compatible NanoSense probes</b>	Yes	Validated
<b>Modbus RS485</b>	No	in progress
<b>Modbus Interpretation</b>	No	NanoSense probes only

<b>Physiological effects</b>	No	Calculation of physiological impacts and storage in databases
<b>Send data in continuous to external databases</b>	No	Several possible recipients
<b>security by token and / or ID &amp; password</b>	No (Paid version)	ID & PW implemented Token by fields "location" to separate
<b>Setting the time zone for displaying and sending data</b>	Automatic	Manual offset management (time zone in progress)
<b>Configuration / configuration web interface</b>	Yes	Yes
<b>Pairing probes with the gateway</b>	EnOcean (Remote commissioning in progress)	Modbus (scan)
<b>Option to dump / databases backup</b>	Export to external database	Export in .sql file (USB key, external DD ..)
<b>Administrator identification management</b>	Yes	No
<b>Export data from a JSON chart</b>	No	Yes
<b>Export data from a graph in CSV XLS PNG JPEG</b>	Yes	No
<b>Recording EnOcean RSSI levels</b>	Yes	In progress. Send to planned BDD
<b>Firmware update</b>	Yes (manually)	Automatic or manual, back N-1 manual (public GitHub platform) NS platform in progress
<b>Agile recovery of sending data</b>	No	in progress
<b>Visualization of the Spaces tree (buildings, floors, rooms etc)</b>	No	Yes
<b>Access to data via the buildings tree</b>	No	Yes
<b>Firmware versioning</b>	Yes	Yes