

## I-CIRRUS INDUSTRY 4.0 SERIES



- IOT datalogger for industrial applications
  - 4 modules DIN RAIL housing.
  - Mains, 12 and 24V power options.
  - Wide range of integrated sensors with full modelization and configuration from cloud.
    - Any modbus sensor or machine.
    - Any 4..20 mA, 0-3V, 0-10V probe.
    - Pulse counters.
  - VPN Simcard provided for cellular models with national, europe and worldwide coverage options.
  - GPRS to ETHERNET micro-router.
- I-CIRRUS-4T series is a perfect choice for sensing and data-logging any kind of application data in indoor and industrial environments such: Electrical consumption monitoring, solar plant monitoring and machinery production.
  - Nuvathings offers the choice to integrate any existing device even with custom protocols, to bring your machinery to the cloud.

The I-CIRRUS 4T industrial datalogger series combine state of the art design with seamlessly NUVA cloud integration. The following models are available depending on communications options.

- **IF-CIRRUS-G:** GPRS communicator with 12 or 24 V external power supply or (F) internal mains power supply
- **IF-CIRRUS-GL:** GPRS communicator with internal mains power supply. LORA-MESH for communications between devices.
- **IF-CIRRUS-GLE:** GPRS communicator with internal mains power supply. LORA-MESH for communications between devices, and ETHERNET with MODBUS-TCP / micro-router.
- **IF-CIRRUS-TLE:** EGPRS+NB-IOT+LTE-MW communicator with internal mains power supply and ETHERNET with MODBUS-TCP / micro-router

Main features:

- GPRS / NB-IOT / LTE-CAT-M1 / LORA communications options
- 3 digital /analog inputs:
  - 4..20 mA sensors
  - 0-10V or 0-3V analog sensors.
  - pulse counters.
- Digital UART input
- 1 Opto isolated input
- 1 analog 0-10V Output.
- 0.1% voltage reference for auto-calibration of AD conversion, to reduce overall measure error on analog inputs within 0.3%.
- RS485 with MODBUS.
- 2 x I2C ports for low power analog probes
- Internal memory of 126K and 32 bits measures
- 20mA average consumption..

## WIRELESS RADIO

where available there is option for LORAWAN

## INNOVATIVE FEATURES:

In combination with other devices of Nuvathings ecosystem, a full range of IOT and industry 4.0 system can be achieved with options for:

- BLE asset tracking
- EDGE alarm triggers processed in the device.
- GPS machinery trackers.
- Cold chain monitoring
- Security and access control.
- Water management solutions
- Custom devices available on request.

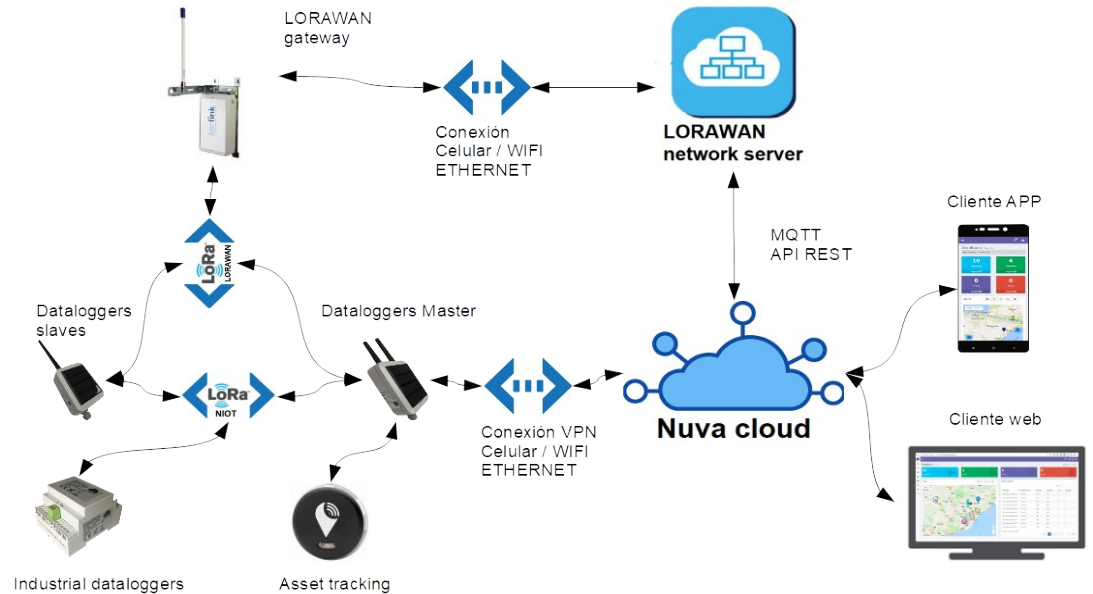
For more information on any of our products or services please visit us on the Web at:

[www.nuvathings.com](http://www.nuvathings.com)

or simply e-mail us at [info@nuvathings.com](mailto:info@nuvathings.com)

## Wide range of connectivity options

I-CIRRUS devices with builtin LORA modem, offer options for connecting through LORAWAN and also to form MESH network between the devices on the factory using a Nuvathings protocol (NIOT-MESH) which is based in DASH7.



## FEATURE SUMMARY

|                                  |                         |   |
|----------------------------------|-------------------------|---|
| <b>EGPRS</b>                     | Bands                   | 850 / 900 / 1800 / 1900 MHz   |
| <b>NB-IOT / CAT-M1</b>           | Bands                   | B1/B2/B3/B4/B5/B8/B12(B17)/B13/B18/B19/B20/B25/B26*/B28/B39 (B39 for Cat M1 only) |
| <b>Device functions</b>          | Configuration           | From cloud platform   |
|                                  | Alarm configuration     | Cloud based   |
|                                  | Alarm processing        | Edge on device  |
|                                  | Internal device logging | 126K 32 bits register   |
|                                  | Analog data register    | Configurable from 1 minute.   |
|                                  | Transmission cadence    | Online  |
| <b>Mechanical and electrical</b> | Size                    | 125 x 75 x 45mm   |
|                                  | Weight                  | 300 gr aprox.   |
|                                  | Operating temperature   | -30°C / +85°C (-22°F/5°F)   |
|                                  | Operating humidity      | 0 - 90% HR, no condensation.  |
| <b>Rules and normatives</b>      | EN 60950                | IMQ certification ( on progress )   |
|                                  | EMC                     | IMQ certification ( on progress )   |



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