## **NUVATHINGS**

## 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.
  - o 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 depeding on communications options.

- I/F-CIRRUS-G: GPRS communicator with 12 or 24 V external power supply or (F) internal mains power supply
- IF-CIRRUS-GL: GPRS comunicator with internal mains power supply. LORA-MESH for communications between devices.
- IF-CIRRUS-GLE: GPRS comunicator 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 comunicator with internal mains powe supply and ETHERNET with MODBUS-TCP / micro-router

#### Main features:

- GPRS / NB-IOT / LTE-CAT-M1 / LORA communications options
- 3 digital /analog inputs:
  - o 4..20 mA sensors
  - 0-10V or 0-3V analog sensors.
  - o 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-RTU / ASCII
- 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.

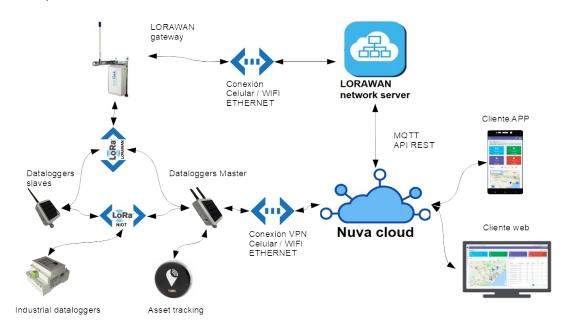
For more information on any of our products or services please visit us on the Web at:

www.nuvathings.com

or simply e-mail us at 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

EGPRS	Bands	850 / 900 / 1800 / 1900 MHz
NB-IOT / CAT-M1	Bands	B1/B2/B3/B4/B5/B8/B12(B17)/B13/B18/B19/ B20/B25①/B26*/B28/B39 (B39 for Cat M1 only)
LORA	Freq / power	869.525Mhz / 17 dBm
Device functions	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
Mechanical and electrical	Size	96 x 75 x 50mm
	Weight	200 gr aprox.
	Operating temperature	-30°C / +85°C (-22°F/5°F)
	Operating humidity	0 - 90% HR, no condensation.
Rules and normatives	EN 60950	IMQ certification ( on progress )
	EMC	IMQ certification ( on progress )



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