

STR4TA SERIES



- IOT datalogger for tracking and static applications
- IP67 housing with Internal battery.
 - Two cable glands
 - Integrable STH21/BME280 probe.
- Primary battery option: 3 x AA batteries
 - EN91 Alkaline – 2800mAh / 4.5V.
 - L91 Lithium – 3500mAh / 5.1V.
 - LiSoCl2 – 2700mAh / 10.8V.
- Wide range of integrated sensors with full modelization and configuration from cloud.

The STR4TA tracker and datalogger series combine state of the art design, with best in class low consumption GNSS module, with seamlessly NUVA cloud integration, common applications for this device include:

- Analog sensor monitoring.
 - Water, gas, and electricity.
 - Smart agriculture
 - Environmental for smart cities
- Smart lightning control gear.
- Tracking for cold chain monitoring
- Vehicle and machinery tracking.
- Cattle tracking.

MODELS

MODEL	COM	PROBE	BATTERY
STR4TA-L	LORA	External	3 x Alkaline or 3 x LiSOC12

PLUGIN AND PROBE OPTIONS

- **FSHT21** - Temp/Hum sensor probe
- **BME280** - Temp/Hum/Pressure sensor module
- **GYUL53L0X** - Time of flight distance sensor
- **MAX 31865** - Module for direct measure of PT100 sensors
- **I2C OLED** - display for external powered devices.

Main technical features:

- LORAWAN communications
- Low power GNSS receiver for Cellular modules.
- Optional external power input : 8 to 36 VDC.
- 2 digital/analog inputs:
 - 4..20 mA sensors
 - 0-10V or 0-3V analog sensors.
 - pulse counters.
- Digital bus enabled for:
 - RS485 – MODBUS
 - SDI12
 - UNE 82326 water measure bus.
- 1 versatile analog output capable of powering external Sensors up to 12V.
- 0.1% voltage reference for auto-calibration of AD conversion, to reduce overall measure error on analog inputs within 0.2%.
- 1 x I2C ports for low power analog plugins and probes
- 1 x SPI port for low power analog plugins and probes
- Internal memory of 126K and 32 bits measures
- 10uA average, standby consumption.

FEATURE SUMMARY

WIRELESS RADIO

where available there is option for LORAWAN low power radio tracker.

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.
- Custom devices available on request.

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

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SHT21 PROBE	Temperature range	-30°C/+85°C (-22°F/+185°F)
	Temperature resolution	0,1°C
	Temperature precision	±0.4°C from -15°C a +85°C
Impact Sensor		Programmable Built in accelerometer 4G range
GNSS receiver	GPS Frequency	1575.42 Mhz
	GLONASS frequency	1601.71 MHz
LORA	Freq / Power	LORAWAN-EU / 14dBm
Impact Sensor	Internal 4G range.	Configurable trigger
Device functions	Configuration	From cloud platform
	Alarm configuration	Cloud based
	Alarm processing	Edge on device
	Internal device logging	126K x 32 bits register
	Analog data register	Configurable from 1 minute (5 default)
	GNSS data register	Configurable from 1 minute (5 default)
	Transmission cadence	Configurable from 1 minute. (30 default)
Mechanical and electrical	Battery (recommended)	3 x AA lithium LiSOC12 options.
	Size	80 x 40 x 30mm
	Weigth	250 gr aprox with batteries.
	Operating temperature	-30°C / +85°C (-22°F/5°F)
	Operating humidity	0 - 90% HR, no condensation.
Rules and normatives	EN 12830	Dec conformity
	Wellmec	Class C
	EN 13485	Dec conformity
	EMC + SAFETY	IMQ certification
	RED	In progress.
	FCC	In progress
Battery lifetime 3 x AA Lithium LiSOC12	GNSS each 5 minutes, and LORA transmission each 30 min.	24 month with 8h @day movement.

Battery life depends on temperature and duty operation cycles, this data is only indicative.