

## STR4TA SERIES



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. The following models are available depending on communications power options and integrated sensor.

Applications for this device include:

- Analog sensor monitoring.
  - Water, gas, and electricity.
  - Smart agriculture
  - Environmental for smart cities
- Smart lighting control gear ( STR4TA-L)
- Tracking for cold chain monitoring
- Vehicle and machinery tracking.
- Cattle tracking.

### MODELS

MODEL	COM	PROBE	BATTERY
STR4TA-GP	GPRS / LORA	External	3 x Alkaline or 3x LiSOCl2
STR4TA-TP	EGPRS / NB-IOT / LTE-M1 / LORA	External	3 x Alkaline or 3x LiSOCl2
STR4TA-L	LORA	External	3 x Alkaline or 3x LiSOCl2

- IOT datalogger for tracking applications
- IP65 housing with Internal battery.
- Primary battery options: 3 x AA batteries
  - EN91 Alkaline – 2800mAh / 4.5V.
  - L91 Litium – 3500mAh / 5V.
  - LiSoCl2 – 8400mAh / 3.6V.
- Best in class low power GNSS module with 3mA consumption @ 3V
- Wide range of integrated sensors with full modelization and configuration from cloud.
- VPN Simcard provided for cellular models with national, europe and worldwide coverage options.

### Main technical features:

- GPRS / NB-IOT / LTE-CAT-M1 / LORA communications options
- Low power GNSS receiver 3mA @ 3V tracking consumption
- 2 digital/analog inputs:
  - 4..20 mA sensors
  - 0-10V or 0-3V analog sensors.
  - pulse counters.
- Digital UART input
- 1 versatile analog output capable of:
  - 0-10V dimming.
  - 12-24V sensors biasing from battery voltage.
- 0.1% voltage reference for auto-calibration of AD conversion, to reduce overall measure error on analog inputs within 0.2%.
- RS485 with MODBUS ( optional ).
- 1 x I2C ports for low power analog probes
- Internal memory of 126K and 32 bits measures
- 5uA average, standby consumption..

# FEATURE SUMMARY

<b>TEMPERATURE PROBE FSHT20</b>	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
<b>Impact Sensor</b>		Programmable Built in accelerometer 4G range
<b>GNSS receiver</b>	GPS Frequency	1575.42 Mhz
	GLONASS frequency	1601.71 MHz
<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>LORA</b>	Freq / Power	869.525 MHz / 17dBm
<b>Impact Sensor</b>	Internal 4G range.	Configurable trigger
<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 ( 5 default )
	GNSS data register	Configurable from 1 minute ( 5 default )
	Transmission cadence	Configurable from 1 minute. ( 30 default )
<b>Mechanical and electrical</b>	Battery	3 x AA, alkaline of lithium options.
	Size	80 x 30 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.
<b>Rules and normatives</b>	EN10830	Dec conformity
	Wellmec	Class C
	EN 13 485	Dec conformity
	EMC + SAFETY	IMQ certification
	RED	Dec conformity
	FCC	In progress
<b>Battery lifetime 3 x AA energizer EN91</b>	GNSS each 5 minutes, and GPRS transmission each 30	4 month with 8h / day movement.
<b>Battery lifetime 3 x AA energizer L91</b>	GNSS each 5 minutes, and GPRS transmission each 30	6 month with 8h / day movement.
<b>Battery lifetime 3 x AA Lithium LiSOC12</b>	GNSS each 5 minutes, and GPRS transmission each 30	18 month with 8h / day movement.

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

## 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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