

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.
- VPN Simcard provided for cellular models with national, europe and worldwide coverage options and eSIM ready.

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 (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 LiSOC12 |
| STR4TA-TP | EGPRS / NB-IOT / LTE-M1 / LORA | External | 3 x LiSOC12 |
| 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:

- GPRS / NB-IOT / LTE-CAT-M1 / LORA communications options
- Low power GNSS receiver for Cellular modules.
- 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 |
| EGPRS | Bands | 850 / 900 / 1800 / 1900 MHz |
| NB-IOT / CAT-M1 | Bands | B1/B2/B3/B4/B5/B8/B12(B17)/B13/B18/ B19/B20/B25Ⓢ/B26*/B28/B39 (B39 for Cat M1 only) |
| LORA | Freq / Power | 869.525 MHz / 17dBm |
| 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 GPRS transmission each 30. | 8 month with 8h @day movement. |
| Battery lifetime 3 x AA Lithium LiSOC12 | GNSS each 5 minutes, and LTE-CAT-M1 tx each 30 min. | 24 month with 8h @day movement. |
| Battery lifetime 3 x AA Lithium LiSOC12 | GNSS each 5 minutes, and LORA transmission each 15 | 24 month with 8h @day movement. |

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