



TrackALYTIX is at the forefront of changing tank level monitoring through our expertise in telemetry technology and wireless tank monitoring.

SiloTrack Nb-IoT Double Sensor by TrackALYTIX

Remote Silo Monitoring with Precision Technology

The SiloTrack Nb-IoT is a cost-efficient, high-precision silo meter designed to monitor load levels by measuring the deformation of silo supports, which correlates with the load they bear. Using the Nb-IoT network, the SiloTrack sensor transmits real-time silo data, accessible from anywhere with an internet connection.

Smart Sensing and Battery Life Management

SiloTrack features an intelligent algorithm that adjusts data transmission frequency based on detected load changes, optimizing battery life. It operates on a user-replaceable disposable battery, with a lifespan exceeding five years under standard conditions (four transmissions per day and typical network coverage). Battery consumption increases with more frequent data transmissions, which can be customized per user requirements.

Effortless Installation and Calibration

Installation is simple—each sensor is secured with two screws to opposing support legs of the silo, and calibration does not require emptying the silo. Calibration is managed through the device's web interface and adjusted after loading the silo with material.

Patented Technology for Enhanced Accuracy

Utilizing patented technology (ES1301859U), the sensor is equipped with dual strain gauges, compensating for environmental factors such as wind or uneven loads, ensuring precise readings regardless of conditions.

Real-Time Monitoring via TrackALYTIX Software

The SiloTrack sensor integrates seamlessly with the TrackALYTIX platform, providing users with real-time and historical data,

Key Features

- **Easy Setup:** Install with four screws; quick calibration.
- **Works on Any Silo:** Measures leg deformation, not weight.
- **Custom Alerts:** Notifications via email or Telegram.
- **Remote Monitoring:** Access data from any device, anywhere.
- **No Wi-Fi Needed:** Supports Nb-IoT, CATM-1, Sigfox, LoRa, Wi-Fi.
- **Seamless Integration:** Easily integrates with automation systems.



Remote Tank Monitoring Solutions

customizable dashboards, and graphs. Users can monitor load levels, battery status, temperature, and network connection, as well as configure alerts and notifications for various parameters. Alerts can be sent via email or Telegram when set conditions are met.

Flexible Connectivity Options

SiloTrack is designed for versatility, supporting multiple communication protocols, including Nb-IoT, CATM-1, Sigfox, LoRa, and Wi-Fi, ensuring compatibility across different environments and applications.

SiloTrack Specifications

Stoichiometric Gauge			
Model	2x Full-bridge stoichiometric gauge	Excitation	3.3V
Temperature Compensation	In the Wheatstone bridge, measuring in both directions	Gauge Impedance per Sensor	1000 ohm
Communications			
Type	NbIoT	Radio Module	SIM7022
Protocol	COAP	Module Certifications	CE
A SIM card from a network provider is required for communication.			
Processor			
Processor	Xtensa® dual-core 32-bit LX6	Clock Speed	240 MHz
ROM/SRAM	448K/520K	Security	Sec boot, flash encrypt, crypto hardware
Power			
Battery type	Primary battery (C size)	Chemistry	LiSOC12 (Lithium Thionyl Chloride)
Construction	Spyral*	Voltage/Capacity	3,6V / 6000mAh
Consumption			
Deep sleep	<7uA	Level reading Energy	TBD uC
Data Transmission Energy	TBD mC	Energy reading Change	TBD uC
Battery Life	The battery life depends on the configured measurement and transmission frequencies. With 4 data transmissions per day >5 years.		

* LiSOC12 batteries with cylindrical construction do not provide the necessary current to power the device. Always use batteries with spiral construction.

SiloTrack FAQs

Q: Can I use it on any type of silo?

A: Yes, it only requires that the silo is raised on legs. Since the sensor measures the deformation of the legs, there are no limitations regarding maximum weight.

Q: Can I use it to measure any product in the silo?

A: Absolutely. The sensor does not come into contact with the stored product, nor does it measure any of its properties. If the product can be stored in the silo, you can measure it.

Q: How does calibration work?

A: Once the sensor is installed, it is calibrated through the web interface generated by the device itself. Then, a load is added, and it is recalibrated at that point.

Q: I am a distributor. Can I use SiloTrack to monitor refills for my clients, plan my routes, or reduce seasonal fluctuations in my work?

A: Without a doubt. Contact us, and we are sure to have the solution you need.

SiloTrack Nb-IoT offers an advanced, user-friendly solution for silo level monitoring, combining accuracy, ease of installation, and remote monitoring through TrackAlytix software.

