Product overview

Odin is an easy-to-use, offline, data acquisition unit, designed to provide leak and theft detection on pipelines in remote areas without power or communications. This small, self-powered, low-maintenance unit attaches directly to the pipeline at any available tapping point with no need for external power or communication, whether it is in a plant, a refinery, a pump station or a valve pit.

Odin works with the Theft Net service. Theft Net is an offline data analysis service unique to Atmos where Atmos engineers analyze the client’s data to identify illegal tapping points and locate them to within meters. Theft Net provides better leak detection sensitivity than conventional online leak detection systems, with no false alarms.

How it works

The internal GPS transmitter acquires an accurate location and time lock while Odin is transported to the installation site. Odin continually logs these GPS data together with measurements from its internal pressure sensor. These data are downloaded and transmitted to Atmos Theft Net engineers who analyze the data for the signs of theft events and locate the theft sites.

Benefits

- Easy to install
- Rental/service model
- No capital expenditure outlay
- Identifies and locates tiny leaks or intermittent illicit withdrawals
- Requires no external power or communication
- Easily concealed from vandals
- Certified for Zone 1, Ex d, ATEX and IECEx
- Self-contained unit
- Long operating time before recharge
- Minimal installation requirements

Example for Odin installation points on a pipeline with slack sections to detect probable theft points.
Features
- Quick installation
- High resolution, high bandwidth pressure transmitter included
- Battery powered
- Collects data for three weeks without recharge
- Inconspicuous design reduces risk of vandalism
- Offline report based leak detection system
- Improves sensitivity over installed leak detection systems
- Expands monitoring range
- Uses the negative wave principle
- Works with most fluid types including: crude oil, multiproduct, water
- Connects to pipelines of any diameter

Technical specification
- Size: 180x120x120mm
- Weight: 2.7 KG
- Battery: 21 days
- Pressure range: 0-100 Barg
- Process connections available
- Operational temperature: -20°C to 55°C

Certification details
- I I 2 G Ex db IIB T6 Gb
- IP 66
- EMT 17 ATEX 0008X
- IECEx EMT 17.0001X

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Model number: ODIN-____-____, 0-100 Barg
Spanner to open unit
SCALE 1:5
About Atmos International

Founded in 1995, Atmos International provides pipeline leak and theft detection, simulation technology, instrumentation and engineering services to the energy, water and associated industries. Atmos is the first choice of most pipeline companies worldwide, and is extensively used by major operators like Shell, BP, ExxonMobil, Petrobras, Enbridge and Total. With associated offices in the USA, China, Russia, Singapore, Indonesia, Colombia, Ecuador, Peru and Costa Rica, and local agents in 28 countries, our multi-cultural and multilingual team is dedicated to effective global support for the lifetime of our products all over the world.

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