

CelloTrack Family

Select applications

- * Cargo, Logistics & Asset Tracking
- * Stolen Vehicle Recovery
- * Trailers and Containers Tracking
- * Train cars Tracking
- * Plant & Construction Equipment
- * Covert Surveillance
- * Security & Special Forces

Features

- * Full set of fleet & asset tracking features
- * Standalone, self-powered tracking device
- * Rechargeable or non-rechargeable battery available
- * Advanced Power management
- * Up to 3 years without charging
- * Entry level product line available -
- * CelloTrack 6M Family
- * Cellocator+ maintenance server compliant
- * Easy installation/No installation



CelloTrack / CelloTrack 6M

CelloTrack is an innovative and adaptable tracking device, used for both mobile and fixed asset management. This small device allows for continual tracking and monitoring of the precise location of valuable assets for a company, increasing its overall operational productivity. Fitted with a durable and long-life battery (lasts approximately 3 years), as well as a highly durable IP67 weatherproof casing, CelloTrack functions optimally without direct access to a power supply and is resilient to severe conditions.

The CelloTrack 6M product version supports the same set of capabilities to offer a cost effective solution that supports up to six months of one GPS reading and GPRS transmission per day, or two months of four readings and transmissions per day, utilizing 2AH rechargeable battery. It utilizes an IP65 dust and weatherproof enclosure and is equipped with different on-board battery connector.



CelloTrack Power / CelloTrack Power 6M

CelloTrack Power has an internal charger, which enables it to be used in situations where an intermittent power supply exists. The CelloTrack Power can be used when permanent installation is required, such as those in trailers where power availability is accessible only when connected to the truck. The unit charges its battery when the power is connected and uses its battery and the advance power management algorithm to maintain tracking when power is disconnected.

The CelloTrack Power 6M product version offers the same set of capabilities, and supports up to six months of one GPS reading and GPRS transmission per day, or two months of four readings and transmissions per day, utilizing 2AH rechargeable battery. It utilizes an IP65 dust and weatherproof enclosure and is equipped with different on-board battery connector.



CelloTrack Lighter / CelloTrack Lighter 6M

The CelloTrack Lighter is useful in situations where an intermittent power supply is accessible. The harness is equipped with a plug, allowing for an easy connection to the cigarette lighter outlet in the vehicle. The CelloTrack Lighter is for applications which require easy deployment, such as for Car Rental.

The CelloTrack Lighter 6M version supports the same set of capabilities to offer a cost effective solution fit for applications where power is connected only on ignition on and minimum installation and maintenance are required. It supports up to six months of a single GPS reading and GPRS transmission per day, or two months of four readings and transmissions per day, utilizing 2AH rechargeable battery and an IP65 dust and weatherproof enclosure.



CelloTrack Container / Lock

CelloTrack Container is a special version of the CelloTrack, which can be installed inside containers in an absolutely covert way. Nothing is visible from the outside; yet containers equipped with the device can be easily tracked, utilizing hidden GPS and GSM antennas.

Designed to offer an agile tracking and cargo monitoring for containers, CelloTrack Container Lock is attached to the container's door, allowing the customer to know exactly where the goods are at any given point, find out if there are any bottlenecks along the way, or if anyone tries to open or tamper with the container's doors. This robust solution is based on CelloTrack Power, a self-powered standalone tracking device, which along with the lock, can be installed and removed from a container within approximately a minute, eliminating the need to open the container.



Features

CelloTrack products offer advanced asset tracking including the following features:

- Durability and long life (please refer to battery life tables below), making it ideal for tracking trailers, trains, containers, high-value assets, and more.
- Stand-alone self-powered tracking device.
- Advanced power management algorithms preserving battery power and extending battery life period.
- Highly durable IP67 and IP65 weatherproof casing that houses all components - battery, GSM module and GPS module.
- A 3D accelerometer that detects movement of assets and enables different transmission rates for a moving asset and a standing asset.
- A programmable (ON/OFF/Test/Panic) push button, charging and communication capabilities, a tamper switch to detect tampering and two monitoring LEDs.
- Minimal maintenance.
- Easy installation, including built in zip tie holes and optional magnetic cradle.

Benefits

The CelloTrack family product line offers businesses many benefits in various settings:

- Providing data in real time with up-to-date and exact reports about past and current asset locations that facilitate smoother management of assets with accurate information as a substitute for physical inventory.
- Offering both fixed and mobile asset tracking, CelloTrack products help prevent loss and unnecessary time wasted used to track displaced assets and conducting asset inventories.
- Allowing for the scheduling of maintenance or services for equipment.
- Lessening the burden on employees with redundant controls and reporting responsibilities.



Applications

CelloTrack products have many tracking applications for security, logistics, transportation and distribution, police and special forces investigations, supply chain and more. Some of the top asset tracking applications include:

Containers: CelloTrack products stand out as a container tracking solution with the rechargeable long life battery and remote activation and administration potential. CelloTrack units can be easily attached to any type of container, such as containers for shipping or cargo.

Heavy Equipment: Despite not being readily movable, heavy equipment and machinery are still susceptible to theft. Examples of heavy equipment that can be tracked by CelloTrack products include construction equipment, demolition machinery and large generators.

Truck Trailers: CelloTrack products protect against theft of assets and improve logistical management by tracking the location of truck trailers. Using the CelloTrack Power unit, CelloTrack is automatically recharged when a trailer is connected to the tractor.

Inventory: The tracking capabilities of CelloTrack products can be readily used to identify the location of inventory. CelloTrack units are used by major airlines in Central Europe to locate spare parts and other special assets stored in its warehouse at major international airports.

Train cars: For both security and logistic purposes, following the location of individual carriage cars whether in transit on the rail tracks.

Cash and Vending Machines: CelloTrack units can be discretely attached to cash and vending machines to track to their location in the case of theft. In addition, CelloTrack can even transmit data regarding inventory levels of such machines.

Boats: The position of a sailboat can be transmitted by CelloTrack, enabling authorities to monitor and follow the trail of competing sailboats on the Internet.

Stolen Vehicle Recovery Backup: Given that CelloTrack products do not require a power source to provide tracking information, they can be installed anywhere on a vehicle and can serve as backup or even as an alternative to traditional stolen vehicle recovery units.

Rental and Leased Vehicles: CelloTrack can easily be deployed on all vehicles because of its compact size, and can be easily concealed, almost anywhere in the vehicle. The precise location of a vehicle can be tracked on the system's Web-based application, saving time when locating vehicles for pickup and return, ensuring lower

fleet insurance premiums and reducing loss of revenue.

Airplanes: The tracking features of CelloTrack family can be applied to record the flight path of small airplanes, helicopters and similar low altitude aircrafts without a direct connection to an engine, complying with a range of aviation regulations.

Others/General: The flexibility and durability of CelloTrack family enable the tracking of any fixed or mobile asset. CelloTrack products can be used to track fleets of leased cars, rental cars or trailers, motorcycles or any other vehicle type.

Product matrix

Product/Feature	Charging Power Source	Ingress Protection	Installation Free	GPS/GSM Cradle Antenna	Ingress Protection
CelloTrack	External	IP67	✓	Internal	✓
CelloTrack 6M	External	IP65	✓	Internal	✓
CelloTrack Solar	Solar	IP67	✓	Internal	✗
CelloTrack Container	External	N/A	✗	External	✓
CelloTrack Container Lock	External	IP67	✗	External	✓
CelloTrack Power	Trailer/Vehicle	IP67	✗	Internal	✓
CelloTrack Power 6M	Trailer/Vehicle	IP65	✗	Internal	✓
CelloTrack Lighter	Cigarette Lighter	IP67	✓	Internal	✓
CelloTrack Lighter 6M	Cigarette Lighter	IP65	✓	Internal	✓

Battery Life Time (Li-Poly)

CelloTrack battery life time

Transmissions per 24Hrs	Life time	
	Months	Years
96	1	0.1
48	2	0.2
24	4	0.3
12	8	0.7
8	10	0.8
6	12	1.0
4	16	1.3
2	24	2.0
1	32	2.7

CelloTrack 6M battery life time

Transmissions per 24Hrs	Life Time
	96
48	10 Days
24	20 Days
12	40 Days
8	50 Days
6	2 Months
4	3 Months
2	5 Months
1	6 Months

The calculations are based on the following assumptions and setup:

- Battery self discharge rate: 3% of available capacity per month @ 25°C
- Battery is fully charged optimally before first use
- Operation mode: periodic peeking
Number of messages per day as specified in the table
- Up to 2.5 minutes total on-time on peeking
- Up to 1.5 minutes GPS on-time on peeking
- Values may vary according to operational conditions

CelloTrack Specifications

Communication

GSM Modes	Quadband GSM/GPRS class 10, TCP / UDP-IP, PDU SMS
SIM	Internal, replaceable, remote PIN code management
Antenna	Internal, quad band GSM antenna

GPS

Technology	Internal module, SIRFIII GSC3F/LP single chipset
Sensitivity (tracking)	-159dBm
Acquisition (normal)	Cold <42Sec, Warm<35Sec, Hot<1Sec

Inputs & Outputs

Inputs	Up to 2 internally pulled up general purpose inputs with optional Analog input, 8bit, 0-2.5V signal
Outputs	Up to 2 general purpose Open collectors (optional)

Interfaces

COM (RS232) Port	Cellocator Serial Protocol Transparent data mode Debug, Configuration, FW upgrade
Accelerometer	3D, Movement detection
MMI	2 LEDs for network & GPS status indication Activation / Distress button Temper switch
Connectors	6 Pin Molex

Power

Input voltage	9-32VDC (for external charging power variants)
Internal Battery	Per Device version: Li-Ion Polymer, 3.7V, 2/13.6Ah, rechargeable OR Li-Ion (Sonata), 3.7V, 4.4Ah, rechargeable OR Lithium / HLC Non rechargeable, 3.6V, 14.4Ah

Environment

Temp, operating	With Li-Poly batteries: Discharging: -20°C - 60°C Charging: 0°C - 45°C With Li-Ion (Sonata): Discharging: -30°C - 70°C Charging: -10°C - 60°C With Lithium non rechargeable: -30°C - 70°C
Temp, storage	Li-Poly batteries: -10°C - 45°C Li-Ion / Non rechargeable: -20°C - 60°C
Ingress Protection	IP67 6M product line: IP65
Vibration, Impact, Humidity	ISO 16750
Mounting	Magnetic / screw mounted Cradle Tampering detection
Certifications	
FCC	Part 15 Subpart B, Part 22/24 compliant
CE	CE EMC & R & TTE according to 89/336/EEC or 1999/5/EC CE Safety EN60950-1:2001+A11:2004
PTCRB	TRP, TIS, Spurious & harmonics emission