



Cellocator Division
Pointer Telocation Ltd.

CelloTrack -T

ADVANCED TRACKING AND REMOTE MONITORING FOR HIGH VALUE MOBILE ASSETS

MARKET SEGMENTS

- Shipping and freight handling:
Trailers, containers, cargo, railcars
- Construction & Utilities
Heavy equipment, machinery, dumpsters
- Rental Companies
Electricity generators, waste containers, chemical toilets, caravans, mobile offices
- Security services
Vending machines, ATMs

FEATURES

- Standalone, self-powered tracking device
- High performance Li-Poly Rechargeable battery
- Advanced Power management
- Up to 3 years without charging
- Ruggedized IP67 enclosure
- Flexible GPI/O configuration
- Scalable communication technology (2G / 3G)
- Fully featured fleet management capabilities
- Cellocator + maintenance server compliant



Construction
Equipment



ContainerTracking



Train Tracking



Rental equipment



POINTER



CelloTrack-T product line, designed for advanced asset tracking and asset management applications, provides enhanced functionality, easy installation, and caters to a wide range of applications.

Companies utilizing CelloTrack-T products can greatly reduce the financial losses incurred by the difficulty in tracking valuable equipment such as trailers, containers, construction machines and other valuable mobile and fixed assets. CelloTrack-T products support tracking, communication, location-based features and other control and maintenance capabilities. The units utilize

advanced power management algorithms preserving battery power and extending battery life period. CelloTrack-T positioning engine is based on SiRFstarIV™, offering high acquisition and tracking performance. The units are equipped with improved IP67 enclosure and dual tampering detection mechanism. Health status monitoring, configuration updates and firmware upgradability are supported via periodical and 'by request' connection to Cellocator+, Cellocator's reputed web-based maintenance server.

CelloTrack-T PRODUCT LINE VARIANTS

CelloTrack-T variants are summarized in the following table.

CelloTrack 2G Family / CelloTrack 3G for NA Family			
	3Y	8M	XT
CelloTrack	CelloTrack 3Y	CelloTrack 8M	CelloTrack XT
CelloTrack Power	CelloTrack Power 3Y	CelloTrack Power 8M	CelloTrack Power XT
CelloTrack Lighter	CelloTrack Lighter 3Y	CelloTrack Lighter 8M	NA

An additional standalone CelloTrack product is the CelloTrack Container Lock. CelloTrack-T accessories include: cradle, magnetic cradle, harnesses, and chargers.



CelloTrack 3Y FAMILY

Includes the following products: CelloTrack 3Y, CelloTrack Power 3Y, CelloTrack Lighter 3Y. Equipped with a durable and long-life battery (lasts Up to 3 years), as well as a highly durable IP67 weatherproof casing, CelloTrack 3Y functions optimally without direct access to a power supply, without ongoing maintenance and with high resilience under severe conditions.

CelloTrack Power 3Y has an internal charger, which enables it to be used in situations where an intermittent power supply exists, sometimes with long periods between power connection events. The CelloTrack Power 3Y can be used when permanent installation and

additional monitoring and control capabilities through the versatile GPIO are required, such as in the case of trailers, electricity generators etc. The unit charges its battery when the power is connected and uses its battery while power is disconnected to ensure continuous serviceability.

The CelloTrack Lighter 3Y 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. CelloTrack Lighter 3Y is fit for applications, which require quick deployment, such as car rental and other rental equipment.



CelloTrack 8M FAMILY ▶

Includes the CelloTrack 8M, CelloTrack Power 8M, and CelloTrack Lighter 8M. The CelloTrack 8M family is the entry level product line, which offers cost effective solutions that support up to eight months of continuous monitoring with single GPS reading and GPRS transmission per day, or two months of four readings and transmissions per day. CelloTrack 8M family supports tracking, monitoring, communication, GPS location-based features and maintenance capabilities similar to that of the CelloTrack 3Y.

CelloTrack XT FAMILY ▶

Includes the following products: CelloTrack XT, CelloTrack Power XT. The CelloTrack XT family is designed for asset tracking in extreme weather environments, fit for applications in arctic or desert conditions. The CelloTrack XT and CelloTrack Power XT units provide a solution for environments that require a wide operational temperature range (-30°C to +70°C) and a wide charging temperature range (-10°C to +60°C). The units support up to thirteen months of single GPS reading and GPRS transmissions per day. CelloTrack XT family supports the same set of capabilities - including the same firmware and almost same PL - as the standard CelloTrack 3Y family.



CelloTrack CONTAINER LOCK ▶

Designed to offer 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.



*Advanced Asset
Tracking and Asset
Management
Applications*

FEATURES

- Outdoor durability and long operating life
- Advanced power and event transmission management algorithms
- 2G and 3G cellular communications technology.
- Highly durable IP67 weatherproof casing
- A 3D accelerometer or movement and towing detection.
- Programmable push button.
- Two monitoring LEDs for GSM/GPS status.
- Dual tamper switch to detect tampering of device from cradle and/or cradle from mounting surface.
- Adaptive transmission rate, automatically adjusted as a function of external power availability and movement status.
- 100 Built in Geo-fences.
- Minimal maintenance.
- Easy installation, including built in zip tie holes and optional magnetic cradle.
- 2 GPIO's which can be used as digital/analog/pulse inputs or digital output.

BENEFITS

THE CELLOTRACK-T PRODUCT LINE OFFERS BUSINESSES MANY BENEFITS IN VARIOUS SETTINGS:

- Improved operation, logistics,
- maintenance and asset utilization.
- Improved security leading to reduced risk and losses.
- Compliance validation of assets with a variety of parameters such as rental terms, environmental conditions and more.
- Remote and proactive response.





BATTERY LIFE TIME TABLE

TX / 24Hrs	CelloTrack 3Y - 13 AH Battery Lifetime	CelloTrack XT - 4.25 AH Battery Lifetime	CelloTrack 8M - 2 AH Battery Lifetime
96	1 Month	10 Days	5 Days
48	2 Months	20 Days	10 Days
24	4 Months	50 Days	20 Days
12	8 Months	3 Months	40 Days
8	11 Months	4 Months	50 Days
5	13 Months	5 Months	2 Months
4	16 Months	7 Months	3 Months
2	22 Months	10 Months	6 Months
1	28 Months	14 Months	8 Months

THE CALCULATIONS ARE BASED ON THE FOLLOWING ASSUMPTIONS AND SETUP:

Battery self discharge rate: 3% of available capacity per month at 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 1.3 minutes GPS on-time on peeking.

Values may vary according to operational conditions.

SPECIFICATIONS

Communication	
Cellular communication	3G NA: HSPA 5.76[UL]/7.2[DL] Mbps; 850, 1900, AWS GSM/GPRS/EDGS; 850, 900, 1800, 1900 (Quad band) 2G: GSM/GPRS, 850, 900, 1800, 1900 (Quad band)
SIM	Internal, replaceable, 1.8/3V Remote PIN code management
Antenna	Internal, multi band GSM antenna
GPS	
Technology	Internal module, SiRF4 chipset.
Sensitivity (tracking)	-163dBm
Acquisition (normal)	Cold <35Sec, Warm<35Sec, Hot<1Sec
Inputs & Outputs	
I/O	Two configurable ports supporting true GPIO (General Purpose Input Output). Each I/O port supports: Discrete Dry Input Discrete Wet Input Analog 0-2.5V Input Analog 0-30V Input Frequency Counter Input Output Discrete Dry – Ground sensing. Configurable ground threshold. Discrete wet – Logic 1 and 0 Configurable thresholds. Analog inputs with variable resolution - 8bit - 0-2.5V: 20mV resolution, accuracy $\pm 30\text{mV}$; 8bits - 0-30V: 100mV resolution, accuracy $\pm 100\text{mV}$ 12bit - 0-2.5V: 3mV resolution, worst case accuracy <10mV; max 20mV. 12bits : 0-30V: 8mV resolution, worst case accuracy <40mV Frequency counters – Up to 5kHz input signal; Signal level ($3\text{V} < V_{in} \leq 30\text{V}$); Accuracy $\pm 2\%$ Output - Open collector
Interfaces	
COM port	Cellocator Serial Protocol Debug, Configuration, FW upgrade RS232, CMOS levels
3D Accelerometer	Movement detection
MMI	2 LED status indication Activation / Distress button Tamper switch

Connectors	CelloTrack	CelloTrack Power
	6 pin Molex, Automotive	Pigtail
Power		
Input voltage:	CelloTrack	CelloTrack Power
	4.2V 1A CCCV Charger	9-32V DC
Internal Battery	CelloTrack 3Y family: Li-Polymer, 3.7V, 13Ah, rechargeable CelloTrack 8M family: Li-Polymer, 3.7V, 2Ah, rechargeable CelloTrack XT family: Li-Polymer, 3.7V, 4.25Ah, rechargeable	
Environment		
Temp, operating	CelloTrack and CelloTrack 8M: Discharging: -20°C – 60°C. Charging: 0-45°C. CelloTrack XT: Discharging: -30°C – 70°C. Charging: -10°C – 60°C	
Temp, storage	CelloTrack and CelloTrack 8M: -20°C – 35°C CelloTrack XT: -20°C – 60°C	
Ingress Protection	IP67	
Vibration, Impact, Humidity chemical	ISO 16750	
Mounting	Magnetic or screw mounted cradle Tampering detection	
Certifications		
CE	CE EMC & R&TTE according to 89/336/EEC or 1999/5/EC CE Safety EN60950-1:2001+A11:2004	
FCC	Part 15 Subpart B, part 22/24 compliant	
IC	ICES-003, Issue 5:2012 Class B. CAN/CSA-CEI/IEC CISPR 22:10	
PTCRB	TRP, TIS, Spurious and harmonics emission	
AT&T	Yes	
Dimensions & Weight		
Dimensions	~155mm x 81mm x 45mm	
Weight	CelloTrack 3Y ~ 490gr CelloTrack Power 3Y ~ 530gr CelloTrack 8M ~ 280gr CelloTrack Power 8M ~ 320gr CelloTrack XT ~ 330gr CelloTrack Power XT ~ 370gr	

HOW TO PURCHASE

For more information please contact Cellocator Division, Pointer Telocation | 14 Hamelacha Street, Rosh Haayin 48091, Israel
Tel: +972-3-5723111 Fax: +972-3-5723100 | e-mail: info@pointer.com www.cellocator.com