



# DTx HD Tracker

(Direct to Anything)

LTE-M (Cat-M1)/NB-IoT with GPS & Wi-Fi Location



Cellular, GPS & Wi-Fi location tracker with a rugged, slim housing designed for direct to cart applications OR integration with [STG Ad Panel](#). Programmable location updates and custom alerts with QuickTrack software.



5.9 x 2 x 0.8 in (149 x 51 x 21 mm)

## Use Cases



### Shopping Cart Tracking - Off & On Premise

No wires, Wi-Fi or locking wheels needed. Once attached, you'll get geofence exit alerts, instant inventory and utilization counts and the ability to track your carts anywhere they go in the world.



### Mobile Asset Tracking

The DTx tracker can be discreetly installed on other equipment such as fork lifts, mobile refrigeration, motorized carts, pallet jacks and other equipment that is commonly stolen or lost.

## Technical Specifications



Location anywhere through preconfigured cellular chip. No extra costs or installation required.



True GPS location with Wi-Fi backup allows precise locations within 30 ft.

Route history saved and logged on device and in [QuickTrack](#) software allowing a route history record of stolen assets.



Replaceable AA Batteries can provide as much as 5 years of battery life.



# Connectivity

Cellular Module	Nordic nRF9160 Modem operates on all major global LTE-M and NB-IoT bands Supported LTE bands: <b>LTE-M (Cat-M1):</b> B1, B2, B3, B4, B5, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B66 <b>NB-IoT (Cat-NB1/NB2):</b> B1, B2, B3, B4, B5, B8, B12, B13, B17, B19, B20, B25, B26, B28, B66
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## Location

Chipset Environment	Semtech LR1110
GPS/GNSS Scanning	Indoor/Outdoor Concurrent GPS/BeiDou
Wi-Fi Location Scanning	Indoor asset location using Wi-Fi access point scanning
Cell Tower Location	Cell tower fallback for positioning when there is no GNSS or Wi-Fi signal Asset
Cloud-Based Solver	location is calculated in the cloud, not on device, reducing battery consumption
*Location Accuracy	~15 ft -200 ft with GPS/GNSS scanning in open areas ~30 ft - 450 ft with Wi-Fi in urban areas ~800 ft to 1 mile with Cell Tower Geolocation - dependent on number of nearby towers
Low Noise Amplifier	GPS signals are filtered and boosted by low-noise amplifier (LNA) allowing operation where other units fail
GNSS Assistance	GNSS almanac data for greater sensitivity and position accuracy

\*Results vary based on real world conditions. Device configuration, installation, environmental conditions, augmentation services, and many other factors may lead to variations in positioning accuracy.

## Power

Input Voltage	2.2 - 3.6V
Sleep Current	<10uA, Average current in lowest power configuration

## Batteries

Replaceable Batteries	2 x AA Batteries
*Battery Life Estimates	Twice Daily Location Updates - 5 Years Daily Updates with Burst Mode - 3 Years

\* Battery life estimates are influenced by several factors including temperature, installation and orientation of the device, the frequency of location updates, network coverage, sensor integrations, peripherals, accelerometer settings, and more.

# Mechanics/Design

Dimensions	5.9 x 2 x 0.8 in (149 x 51 x 21 mm)
IP/IK Rating	Ultra-rugged and waterproof IP68 and IK07-rated housing can withstand impact, fine dust, and brief submersion
Operating Temperature	-22° F to 140° F (-30°C to +60°C)
Cellular Antenna	Internal
GPS Antenna	Internal
Wi-Fi Antenna	Internal
3-Axis Accelerometer	3-Axis accelerometer to detect Movement and High-G events
Diagnostic LED Flash	Diagnostic LED indicates operation status
Memory	Internal flash memory stores approximately 1400 records
Temperature	Reports internal temperature which provides an indication of ambient temperature

## Smarts

Adaptive Tracking	Customizable location updates and reporting conditions. Movement based, time based and geofence triggers can all influence when a tracker communicates its location. These automated or manual updates can be used to conserve battery life and provide location intelligence exactly when you need it.
Battery Life Monitoring	'Battery Low' and 'Battery Critical' alert levels
Geofence Alerts	QuickTrack platform can use device location to create geofences anywhere and alerts if an asset enters or leaves designated locations
Impact Detection	Impact-detection alerts when G-forces are exceeded by a defined threshold
Run Hour Monitoring	Capture run hours based on movement to understand and optimize asset utilization
Tamper Detection	Optional magnetic switch provides an alert if the device is removed
Theft Recovery	Automated or manual triggers for "Burst Mode" to quickly locate off-premise carts with near real time location updates while conserving battery when on premise.

## Security

Data Security	Military-level AES-256 Encryption from device to Device Manager to protect the integrity and confidentiality of telematics data. Data forwarded to QuickTrack software is sent via HTTPS for end-to-end security.
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