Simply Unified

SU-6700
CORE

NB-IoT

Lowest-cost battery-powered indoor/outdoor asset tracker for NB-IoT networks

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

Indoor/Outdoor

Wi-Fi AP MAC Address Scanning and Cell Tower location for seamless indoor/outdoor asset management

'Deploy Once' Battery Life

10+ years on 2 x AA user-replaceable batteries with 'Battery Low' and 'Battery Critical' alerts

Cloud-Based Location

Position calculations are handled in the cloud (versus on-device) for substantial power savings

Adaptive Tracking

Tracks assets when they're on the move and enters sleep mode when stationary to conserve energy

Magnetic Activation & Tamper Detection

Magnetic switch for activation and Tamper Detection

Slim & Ultra-Rugged

Compact and waterproof housing ensures the device can withstand impact, fine dust, and brief submersion

Connectivity

Cellular Module	The Quectel BC660K-GL is a high-performance NB-IoT (NB2) module which supports multiple frequency bands of: B1/B2/B3/B4/B5/B8/B12/B13/B14/B17/B18/B19/B20/B25/B28/B66/B70/B85
SIM Size & Access	Internal Nano 4FF SIM eSIM Ready *(MOQs apply)*

Location

Chipset	Semtech LR1110
Environment	Indoor/Outdoor
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 Wi-Fi signal
Cloud-Based Solver	Asset location is calculated in Digital Matter's Location Engine
*Location Accuracy	~10m-100m with Wi-Fi in urban areas ~250m-1km Cell Tower Geolocation - dependent on number of nearby towers Results vary depending on real world conditions

*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 - 3.8V
Sleep Current	<10uA* *Average current in lowest power configuration

Batteries

User-Replaceable Batteries	2 x AA. Batteries not included.
Supported Battery Types	Alkaline Lithium (LiFeS2) – recommended for best performance *Please dispose of Lithium batteries in a safe and responsible manner
*Battery Life Estimates	Once Daily Location Updates – 10 years **Movement-Based Location Updates – 4.5 years Hourly Location Updates – 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.

** Movement-based estimates are based on 2 hours of movement, occurring 5 days a week, with default tracking parameters (location updates every 3 minutes and uploads every 30 minutes). Devices can be configured to provide more frequent location updates when the asset is in motion.

Mechanics/Design

Dimensions	149 x 51 x 21 mm (5.9 x 2 x 0.8 in)
Housing	Non-branded housing for optional white-labelling
IP/IK Rating	Ultra-rugged and waterproof IP68 and IK07-rated housing ensures the Barra can withstand impact, fine dust, and brief submersion
Installation	Compact and concealable. Multiple installation options for covertly and easily securing the device to assets with screws, bolts, cable ties, rivets, and more.
Magnetic Switch	Magnetic switch enables quick activation and tamper detection
Operating Temperature	-30°C to +60°C
Cellular Antenna	Internal
Wi-Fi Antenna	Internal
3-Axis Accelerometer	3-Axis accelerometer to detect Movement and High-G events
Diagnostic LED	Diagnostic LED indicates operation status
Flash Memory	Store weeks of records if device is out of cellular coverage
Speed and Heading	Scanning technology used on the Barra Core does not return speed and heading
Onboard Temperature	The device reports internal temperature which provides an indication of ambient temperature

Smarts

Adaptive Tracking	Configure parameters to send updates based on set time intervals or when movement occurs. Adaptive tracking technology detects when the device is on the move and increases the update rate, providing detail when you need it while conserving battery when stationary.
Battery Life Monitoring	'Battery Low' and 'Battery Critical' alert levels
Geofence Alerts	The server can use device location to create geofences and alerts if an asset enters or leaves designated locations
Impact Detection	Configure impact-detection alerts when G-forces are exceeded by a user-defined threshold
Magnetic Activation	Magnetic switch can be used to activate the unit – meaning SIM cards and batteries can be pre-installed, simplifying deployment
Run Hour Monitoring	Capture run hours based on movement to understand and optimize asset utilization
Sleep Mode	Stationary devices enter sleep mode until movement occurs to conserve battery life and optimize data usage
Tamper Detection	Magnetic switch provides an alert if the device is removed from your asset
Theft Recovery	Switch to Recovery Mode in the case of theft or loss to activate real-time tracking for asset retrieval

Device Management

Flexible Configuration	Configure device parameters such as position update rate, movement, and accelerometer settings, and more to fit any tracking application
Device Management Platform	Manage, monitor, configure, debug, update, and restart devices remotely from our cloud-based device management system
Configuration App	Configurable with DM-Link provisioning tool

Integration

Third-Party Integration	TCP Direct or HTTPS Webhook

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 third-party systems is sent via HTTPS for end-to-end security.

Warranty

Manufacturer's Warranty	Two-year manufacturer's warranty. Exclusions apply.

Certifications

Regulatory	Please check our knowledge base for regulatory and network certifications
Network	Upon request