DART3 BLE

Cellular LTE-M (Cat-M1) / NB-IoT

- High-performance, high-precision GPS tracking device
- Wire into power for real-time vehicle and fleet tracking
- Bluetooth® gateway to report on BLE tags and sensors, wireless Driver ID
- Flexible Input Monitoring - 1 x Ignition Digital Input, 3 x Digital Inputs, 1 x Analog Input, 1 x Switched Ground Digital Output, Switched Power Out
- Supports Accident Detection, Driver ID, Driver Behavior, Remote Immobilization
- Backup battery in case of loss of power or tampering

Real-Time Tracking | Inputs/Outputs | End-to-End Security | Highly Configurable | Future Proof Connectivity | White-Label & Integration Ready

Asset Visibility & Recovery

Monitor location and movement with the option to activate real-time tracking in case of loss or theft.

Real-Time Tracking

Device remains continuously connected while on the move for real-time vehicle tracking.

BLE Tag & Sensor Monitoring

Integrate with any third-party Bluetooth accessory for customizable sensor and condition monitoring.

Accident Detection

Alerts for accidents and rollovers, activated by significant changes in velocity and orientation.

Driver ID

Configure Bluetooth®, RFID reader, iButton®, or Wiegand interface for Driver ID.

Driver Safety & Behavior

Monitor speeding, harsh acceleration, braking, cornering, and more.

Remote Immobilization

Digital outputs can be connected to a relay to enable remote immobilization.

Flexible Input Monitoring

Interface with a range of devices and switches for seatbelt detection, duress buttons, lights, warning buzzers, and more.

Backup Battery

Features an internal backup battery in case of loss of power or tampering.

FLEET MANAGEMENT | VEHICLES | EQUIPMENT | LEASING | INSURANCE | COMPLIANCE

Connectivity

Cellular Module	Nordic nRF9160 operates on all major global LTE-M and NB-IoT bands. Supported LTE bands: LTE-M (Cat-M1): B1, B2, B3, B4, B5, B8, B12, B13, B14, B18, B19, B20, B25, B26, B28, B66 NB-IoT (Cat-NB1/NB2): B1, B2, B3, B4, B5, B8, B12, B13, B17, B19, B20, B25, B26, B28, B66
Bluetooth®	Bluetooth 5.2 gateway reports nearby Bluetooth tags and sensors.
SIM Size and Access	Internal Micro 3FF SIM

Location

GNSS Module	u-blox M10
Constellations	Concurrent GPS, GLONASS, Galileo, BeiDou
GNSS Assistance	GNSS almanac and ephemeris data for greater sensitivity and position accuracy.
Low Noise Amplifier	GPS signals are filtered and boosted by a SAW filter and low-noise amplifier (LNA) allowing operation where other units fail.
Location Accuracy*	~2m CEP

* Positioning accuracy specifications are provided by the module supplier and reflect ideal conditions. Device configuration, installation, environmental conditions, augmentation services, and many other factors may lead to variations in positioning accuracy.

Power

Input Voltage	8-33V DC (max)
High-Performance Automotive Power Supply	Stringent power “load dump” tests are conducted to ensure operation in the harshest automotive electrical systems. Built-in self-resetting fuse makes installation simple and safe.
Intelligent Power Management	Device enters sleep mode when vehicle is inactive to prevent battery drain.

Sleep Current	<1mA (no peripherals supplied and battery fully charged)
Backup Battery	300mAh LiPo internal backup battery pack.

Mechanics / Design

Dimensions	99 x 76 x 19 mm (3.90 x 2.99 x 0.75 in)
Housing	Non-branded housing is suitable for white labeling.
Installation	12 wire harness / 650mm length supplied as standard. OBDII and Cigarette Lighter harness options available for quick and easy (or temporary) installs.
Temperature Range	Operating: -30°C to +60°C (connected to external power) At < 0°C and > +40°C the internal backup battery will not be charged as a safety precaution due to the dangers associated with charging batteries at extreme temperatures. Recommended Storage: 10°C to 30°C, Humidity 30%. Store in a cool, dry place.
Cellular Antenna	Internal
GPS Antenna	Internal
3-Axis Accelerometer	3-Axis accelerometer to detect movement, acceleration, high-g events, and more.
Diagnostic LED	Diagnostic LED indicates operation status.
Flash Memory	Store records if device is out of cellular coverage. View storage capacity here.
Onboard Speed and Heading	The device continuously monitors speed and heading, allowing for over-speed alerts as well as updates on speed and heading changes.
Onboard Temperature	Provides ambient temperature but may not be suitable for precise temperature logging purposes.

Interfaces

Analog Input	1 x Analog Input 0-40V
Digital Inputs	3 x Digital Inputs Configurable pull-up/down 0-48V DC Input Range Digital Input 3 pin shared with Driver ID.
Digital Outputs	1 x Switched Ground Digital Output – 2A max Easily wired up to switch external lights, relays, buzzers, etc. Can be used to immobilize a vehicle.
Ignition	1 x dedicated ignition Digital Input 0-48V DC 2.2V on threshold May be used as a digital input if not required.
Switched Power Out	3-5Vout Max current 500mA
TTL Interface	Serial interface used to connect a Digital Matter RFID reader for Driver ID.
Wiegand	Wiegand Interface enables easy integration with a variety of RFID card types and readers.
1-Wire® or iButton®	1-Wire® or iButton® can be used to read Driver ID tags. Readers available to suit multiple card formats.

Smarts

Accident and Rollover Detection	Configure accident and rollover alerts, triggered by extreme changes in the velocity and orientation of the vehicle or equipment. Up to 2 hours of second-by-second 'black box' data is stored to provide critical accident reconstruction data.
Driver ID Options	Bluetooth®, RFID reader, iButton®, or Wiegand interface for Driver ID, access control, and log booking.
Driver Safety and Behavior	Monitor speeding, harsh acceleration, braking, cornering, idle times and more to improve safety and prevent unnecessary wear on vehicles.

Flexible Input Monitoring	Interface with a range of devices and switches for seatbelt detection, duress and panic buttons, lights, in-cab warning buzzers, and more.
Geofencing	The server can use device location to create geofences and alerts if an asset enters or leaves designated locations. Geofences can also be downloaded directly to the device for enhanced location-based actions and alerts. View storage capacity here.
GPS Jamming Detection	GPS jamming or interference can be detected and alerted on.
In-Vehicle Alerts	Can be wired up to external buzzers or lights for in-vehicle alerts.
Preventative Maintenance	Set reminders based on distance travelled and run hours to reduce maintenance and repair costs.
Real-Time Tracking	Device remains continuously connected while on the move for real-time asset tracking.
Remote Immobilization	Digital outputs can be connected to a relay to enable remote immobilization of vehicles and equipment in the case of theft, abuse, or unauthorized usage.
Run Hour Monitoring	Calculate run hours and distance travelled (odometer) to understand and optimize asset utilization.
Tamper Alerts	Instant alert if the device is disconnected from its power source.
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
API	Command and configure the device via rich API functionality.

Security

Data Security	Military-grade AES-256 Encryption from device to Device Manager to protect the integrity and confidentiality of your 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

Please view our knowledge base for regulatory and network certifications.