

## Debut® OMNI 3GC I - \$899

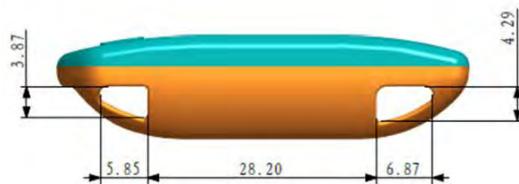
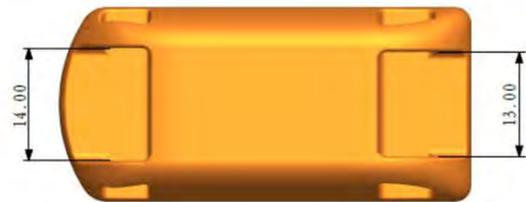


OMNI 3GC I is a solar-powered GPS-3G-ACC tracker suitable for backpack deployment.

It is a model customized from the Debut OMNI hardware development platform.

### Appearance & Dimensions

- Dimensions: 50.79 mm x 24.2 mm x 12.8 mm
- Weight: 10.4 ± 0.2g
- Antenna: Completely Internal
- Housing: Strong and waterproof, with multiple harness threading holes. (Note that the below colors are only to show the structure. Actual housing color is white.)



### Data Types

- GPS: longitude, latitude, altitude, geoid height, course, satellite quantity
- ENV: voltage, light intensity, temperature
- BHV: ODBA (overall dynamic body acceleration)
- ACC: x/y/z acceleration data (upon request)
- BSS: longitude, latitude, altitude (alternative locating method for extreme situation)

### Power Supply

- Solar type: GaAs solar unit (30% efficiency) with good performance under weak light
- Battery type: Lithium polymer rechargeable battery with under-and-over-charge protection
- Battery capacity: 30mAh

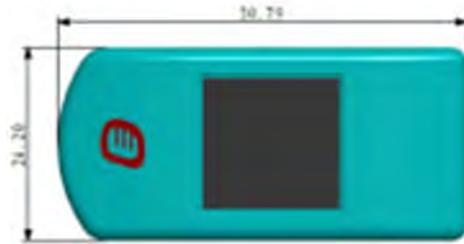
Fully charged battery is sufficient for logging over **1,000** GPS positions without recharge under optimal GPS satellite view. On-bird tests with **5** min GPS interval and no recharge generate **200** GPS positions on average.

## GPS Module

- GPS precision: CEP (50%) 5m
- Maximum update rate: 10 Hz

## Data Collection & Transmission Setting:

- Regular-Interval Mode
  - GPS interval: 5 min ~1 day
  - ENV interval: 5 min ~1 day
  - ODBA interval: 10 min/30 min
  - ACC interval: 25 Hz, 3 seconds in every 10 min (by default)
  - Transmission interval: 5 min ~1 day



Above ranges are selectable on website data platform or App. Contact us if other settings are desired.

- On-Time Mode
  - Transmission: Up to three times at fixed hours per day (such as 13:00/14:00/18:00)
  - GPS/ENV/BHV: Regular-interval model or on-time model follow each transmission
- Sleep Mode
  - This mode is to deactivate certain type of data collection for:
    - a certain period (from minutes to months)
    - a regular period each day (a maximum of 16 hours)

## Intelligent Frequency Optimization & Flight Detection (BOOST)

The BOOST function intelligently increases data collection & transmission frequency when the charging condition are good or the bird is flying. The default setting is as below:

- Frequency Optimization: every 10 min/1 min
- Flight Detection: every 20 sec

With BOOST, the device portrays detailed movement tracks without manual intervention and avoids the possibility of battery drain due to radical settings in bad weather.

## Data Storage

Logged data will be stored in memory if network is unavailable.

- Flash memory: 16 MB
- Regular data storage: 460 days at default setting (1h GPS+1h ENV+10 min BHV)
- BOOST data storage: 280,000 records
- ACC data storage: 28,700 records

## Operational Environment

- Working temperature: -20°C~60°C
- Waterproof: IP 68