

# TG9

## IoT tracking device

TG9 is a small IoT device for long-term tracking and data monitoring of assets and equipment globally.

Featuring robust casing with long battery life, it comes with advanced and intelligent sensor technology.



3G/2G



Battery



IP69k casing



Position



Radio beacon



Motion



Shock



Tilt



Light



Utilization



External tags



Temperature



**TG9** is a small IoT tracking device and data logger that offers **asset monitoring and data tracking** of any asset; from non-powered equipment to entire fleets.

Its **robust casing** is suited for all industrial environments and all-weather conditions with an operating temperature range from  $-30^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ . Battery life-time is typical 7 years based on 1 transmission/day.

The device uses a penta-band **3G/2G module** to send transmissions to a server. Transmissions can be set at user-fixed intervals and if specified events occur.

Devices out of data coverage will **log data input** until coverage is available again.

A built-in **3-axis accelerometer** offers high-precision data on motion, shock and orientation, while other sensors track light and temperature.

Available **external wireless RHT and RFID-tags** offer humidity sensor and additional temperature data.

Position data is acquired by **GPS** or via mobile network triangulation if GPS is not available. A built-in radio beacon can be activated for close-range location.

Data can be viewed on a cloud-based data portal that provides **complete visibility and data analytics**. It provides insights on location, performance, and status of assets and equipment. Data is available on maps, in graphs and in reports. API options are available.

**Flight mode** feature is available to suppress all radio transmissions to ensure safe conditions during flight.

Devices are in operation all over the world in industries like construction, theft recovery, wind, and logistics.

## Specifications

|   |   |
|---|---|
| Type:                                   | T9.300  |
| Battery lifetime                        | Typical 6000 transmissions based on 1 transmission/day *                              |
| Sensors                                 | Position, Motion, Tilt, Light, Utilization, 3-axis Shock (up to 8 g)                  |
| Data log                                | Store-and-forward log, default 200 entries of all data incl. position and sensor data |
| Antenna, GPS                            | Internal  |
| Antenna, 3G/2G                          | Internal  |
| Antenna, radio                          | Internal  |
| Radio beacon                            | UHF   |
| Network technology                      | 3G/2G, penta-band (850/900/1800/1900/2100 MHz)  |
| SIM                                     | Embedded, subscription required   |
| Server communication                    | GPRS/UMTS/HSPA with SMS backup  |
| Server protocols                        | API available upon request  |
| Configuration                           | Via server  |
| External tag connectivity               | Yes   |
| Housing                                 | PA6 (nylon) potted with epoxy   |
| IP rating                               | IP69k   |
| Maximum allowed continuous acceleration | 8 g   |
| Dimensions                              | 112 x 68 x 39 mm  |
| Weight                                  | 405 gram  |
| Battery package                         | 47 Wh (Primary lithium, encapsulated)   |
| Lithium content                         | 3,8 gram  |
| Temperature, operating                  | -30 °C to +85 °C  |
| Temperature, storage                    | +30 °C max (recommended)  |
| ADR                                     | UN3091  |
| US content                              | 0%  |
| ECCN                                    | EAR99   |
| HS (TARIC export) code                  | 8526912020  |
| Country of origin                       | Made in Denmark   |

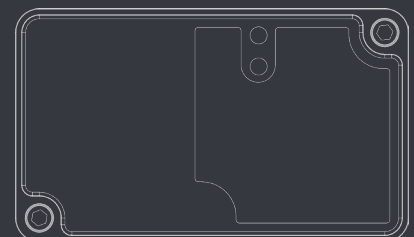
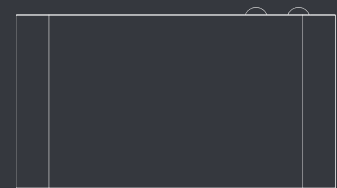
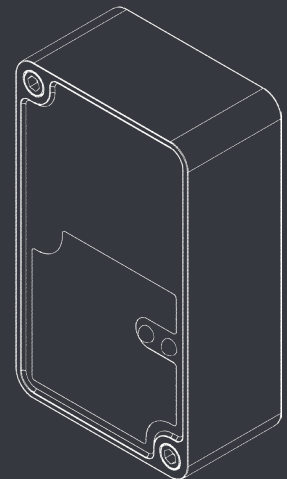
## Typical number of transmissions

| Network              | 3G    | 3G/2G ** | 2G   |
|----------------------|-------|----------|------|
| 1 transmission/day   | 6000  | 5500     | 5000 |
| 4 transmissions/day  | 9000  | 8000     | 7000 |
| 24 transmissions/day | 10000 | 9000     | 8000 |

Without GPS, add 10% to above

\*) Depending on signal and temperature conditions

\*\*) 50% 3G and 50% 2G



Version 6.0 - Subject to change without notice.  
This data sheet references to firmware 3.54 or newer.