

TG10

IoT tracking device

TG10 is a 3G/2G tracking device for long-term tracking and monitoring of assets and equipment globally.

It is built on advanced and intelligent sensor technology in a smart design with features including long battery life, easy installation and robust casing.



3G/2G



Position



Triangulation



Utilization



Temperature



Humidity



Shock



Tilt



Light



Battery



Radio Beacon



Flight Mode



TG10 is a unique product with typical 10 years battery lifetime based on transmissions of 1 position/day.

The robust casing is suited for all industrial environments and all-weather conditions with an operating temperature range from -30°C to $+85^{\circ}\text{C}$.

TG10 provides global connectivity of any asset, both powered and non-powered equipment and entire fleets. It is primarily designed for heavy industries like transport and logistics, construction, wind power, rental, and theft protection and recovery.

TG10 transmits data to a cloud-based management software that provides complete visibility and predictive analytics. It gives insights on location, performance, and status of assets and equipment.

TG10 uses a penta-band 3G/2G module to send transmissions to a server. Transmissions can be set at user-fixed intervals, for example twice per day. Devices out of data coverage will log sensor input until coverage is available again.

The built-in 3-axis accelerometer will trigger accurate data on motion, shock, tilt and utilization, while other sensors track temperature and light. Available external wireless RHT and RFID-tags offer humidity sensor and additional temperature data. A flight mode feature suppresses radio transmissions to ensure safe conditions during flight.

Positions are 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.

Specifications

Battery lifetime	Typical 9000 transmissions based on 1 transmission/day *
Sensors	Position, Motion, Tilt, Temperature, Light, Utilization, 3-axis Shock (up to 8 g)
Log	Store-and-forward log, up to 200 entries of all data incl. position and sensor data
Network technology	3G/2G, penta-band (850/900/1800/1900/2100 MHz)
Antenna, GPS	Internal
Antenna, 3G/2G	Internal
Antenna, radio	Internal
Radio beacon	UHF
SIM	Embedded, subscription required
Server communication	GPRS/UMTS/HSPA with SMS backup
Server protocols	API available upon request
Configuration	Via server
Temperature, operating	-30°C to +85°C
Temperature, storage	-40°C to +85°C
Housing	PA6 (nylon) potted with epoxy
IP rating	IP69k
Dimensions	112 x 68 x 44 mm
Weight	425 g
Battery package	94 Wh (primary lithium, encapsulated)
Lithium content	7,6 gram
ADR	UN3091
US content	0%
ECCN	EAR99
HS (TARIC export) code	8526912020

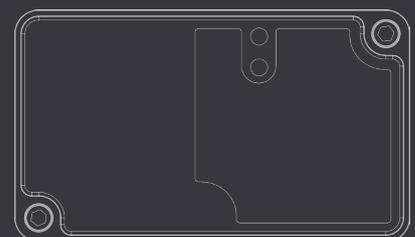
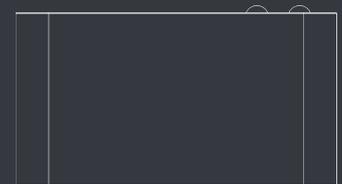
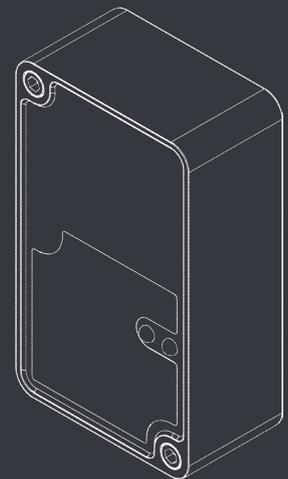
Typical number of transmissions

Network	3G	3G/2G **	2G
1 transmission/day	9000	8500	8000
4 transmissions/day	13000	12000	11000
24 transmissions/day	15000	14000	13000

Without GPS, add 10% to above

*) Depending on signal and temperature conditions

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



Version 5.4 – Subject to change without notice.
This data sheet references to firmware 3.10 or newer.