

# FTC881

ENGINEERING SAMPLE

SMALL AND SMART WATERPROOF GPS TRACKER WITH 4G LTE CAT 1 CONNECTIVITY



## PRECISE GNSS

Enhanced tracking accuracy for location-based services

## 4G CAT 1

Reliable 4G (Cat 1) connection with fallback 2G (GSM) network

## IP69 WATERPROOF CASING

Maximum protection against dust, high pressure water and steam

## HIGH VOLTAGE POWER SUPPLY

Allows connection to battery powered vehicles



AGRICULTURE



CONSTRUCTION MACHINES



TRACK AND TRACE APPLICATIONS



MICRO MOBILITY



COURIER DELIVERY SERVICES



LIGHT VEHICLES

It is one of the first three products on the New Platform based on a brand-new chipset. The New Platform covers both new firmware development standards and new hardware. The main advantages, such as precise GNSS will enable even more use cases for the clients. The product supports LTE with fallback to 2G, what will allow to have a future-ready solution when 2G sunsets.

An extremely fast and easy installation allows connecting the device in a few minutes! No specific knowledge or engineers are required for installation. In addition, it is a product that has maximum protection against dust and water. The IP69-certified casing saves the tracker from dust, high-pressure water jets, which means that tracking is possible in any environment of every industry.



**Product**

Model name                      FTC881-QJAB6

**GNSS**

GNSS                                      GPS, GLONASS, GALILEO, BEIDOU

Receive type                            135 tracking/acquisition channels

Tracking sensitivity                    -165 dBm

Position accuracy                      < 1.5 m CEP

Velocity accuracy                      < 0.1 m/s (within +/- 15% error)

**Cellular**

2G bands                                   GSM: B2/B3/B5/B8

4G bands                                   LTE FDD (CAT 1): B1/B3/B5/B7/B8/B20/B28

Data transfer                            LTE FDD (CAT 1): Max. 10 Mbps (DL) / Max. 5 Mbps (UL)  
GSM (GPRS): Max. 85.6 Kbps (DL) / Max. 85.6 Kbps (UL)

Transmit power                           Class 5 for GSM850/900: 30±5dBm  
Class 3 for GSM1800/1900: 29±5dBm  
Class 3 for LTE-FDD: 26±5dBm

Data support                              SMS (TEXT, PDU), Network protocols (TCP)

**Data Codec**

Codec support                            Codec 8 Extended

**Power**

Input voltage range                    10 - 70 V\*

Back-up battery                           320 mAh Li-Ion battery 3.7V (1.18 Wh)

Internal fuse                              3 A

Power consumption                    TBD

\* Further modifications will have input voltage range of 10-90V

**Physical specification**

Dimensions                                118x48x18.5 mm (L x W x H)

Weight                                        118 g

### Operating environment

Operating temperature (without battery)	-40 °C to +85 °C
Storage temperature (without battery)	-40 °C to +85 °C
Operating temperature (with battery)	-20 °C to +40 °C
Storage temperature (with battery)	-20 °C to +60 °C
Operating humidity	5% to 95% non-condensing
Ingress Protection Rating	IP69
Battery charge temperature	0 °C to +45 °C
Battery discharge temperature	-20 °C to +60 °C
Battery storage temperature	-10 °C to +50 °C for 1 month -10 °C to +35 °C for 3 months 0 °C to +30 °C for 1 year

### Interface

Connection	U-Type cable
GNSS antenna	Internal High Gain
Cellular antenna	Internal High Gain
USB	2.0 USB Micro B
LED indication	2 status LED lights
SIM	Nano-SIM
Memory	32Mb internal flash memory

### Features

Sensors	Accelerometer
Scenarios	Over Speeding detection, Jamming detection, Unplug detection, Trip
"Configuration and firmware update"	FOTA Web, Teltonika Configurator (TCT)
SMS	Configuration, Events, Debug
GPRS commands	Configuration, Debug
Time Synchronization	GNSS, NITZ, NTP
Ignition detection	Accelerometer, External Power Voltage

### Certification & Approvals\*

\*In progress