

# BQ18

## LTE&2G Rich Feature Tracker

BQ18 is an 18-wire GPS tracker tailored to meet the rigorous demands of modern fleet management. It provides comprehensive real-time location tracking and supports advanced functionalities such as engine diagnostics, driver behavior analysis, fuel efficiency monitoring, and crash data collection. BQ18's robust performance and versatile features make it an ideal solution for optimizing fleet operations, ensuring reliable vehicle monitoring, and enhancing operational efficiency and safety. It's a perfect choice for fleet managers and businesses seeking a dependable and efficient tracking solution.



## Features



4G CAT-1 with 2G fallback



Multiple I/Os



1-Wire



RS232&485



Crash data



BLE 5.0

# SPECIFICATIONS

## NETWORK

Data Support	TCP, UDP,SMS
LTE CAT-1	EMEA Version: B1/B3/B5/B7/B8/B20 America Version: B1/B2/B3/B4/B5/B7/B8/B28/B66
LTE Power	Class3 (23dBm+/- 2dB)
LTE Data	CAT-1: DL: 10Mbps, UL: 5Mbps EMEA: 900/1800 Mhz
GSM	South America:850/900/1800/1900MHz
GPRS Power	Class 1
SIM Card	1.8/3.0V

## GNSS

Location Technology	GPS Engine GPS/Glonass/Galileo/BeiDou GPS/QZSS L1 C/A, Glonass L10F BeiDou B1, Galileo E1 B/C SBAS L1 C/A: WAAS, EGNOS, MSAS, GAGAN
Concurrent GNSS	3
Update Rate	1 Hz
Channels	66
Tracking sensitivity	-165dBm
Cold Start Open Sky	32S Open Sky
Aided Start	2S Open Sky
Reacquisition	1S Open Sky
Assisted GPS	Supported
Antenna	Patch Internal

## ELECTRICAL

Operating Voltage	8-40V DC operational for 12V & 24V Vehicle support per SAE J1455 2mA 12V (Sleep)
Power Consumption	50mA 12V (Power Save) 110mA 12V (Active Tracking)
Backup Battery	LI-PO 220mAh Battery Recharging Range is 0 to +45°C

## MEMORY

CPU	ARM Cortex M4
Flash Memory	8Mbit
3D Accelerometer	On Board

## INTERFACES

Digital Inputs	2 Digital inputs
Ignition Sense	One dedicated wire for Ignition
Programmable Input	One configurable input to negative trigger digital input or analog input
Analog Input	One dedicated analog input
Digital Output	Two digital outputs, open drain, 300mA drive current max
Latched Digital O/P	One digital output with internal latch circuit,open drain, 150mA drive max
Two-way Audio	2 differential outputs; 1 audio input
Serial Port	RS232&485 port for external devices
1-Wire Solution	1 wire interface (Driver ID/Fuel Sensor)
Status LEDs	GNSS, Network, Power
BLE 5.0	for Wireless Sensor

## CONNECTORS

Connector Type	18 Wire Pigtail
Mini USB	1 Mini USB (configuration/debug)
Power Switch	Device Power ON/Off Switch
GPS Antenna	Internal
GSM Antenna	Internal
SIM Card	Internal (4FF) or Embedded eSIM (MFF2)

## PHYSICAL

Dimensions	110(L) x 554(W) x 22(H)mm
Weight	125g

## ENVIRONMENTAL

IP Rating	IP68
Operating Temperature	-40 ~ +85° C (without Backup Battery) -10 ~ +50° C (with Backup Battery)
Humidity	95%RH @ 50° C non-condensing
Shock & Vibration	U.S. Military Standards 202G and 810F, SAE J1455
EMC/EMI	SAE J1113; FCC-Part 15B
RoHS	Compliant

## GENERAL

Communication Mode	LTE/GPRS and TCP/UDP/SMS
Location Technology	66 Channels GNSS
Operating Voltage	12 and 24 Volt Vehicle Systems