



# FM36M1

Teltonika delivers to you the first tracker worldwide with CATM1 connectivity. Manage your fleet professionally at the lowest expenses possible.

## Experience brings the future product live

For over 19 years we have been consistently working towards creation of Internet of Things (IoT) with a goal where our products and solutions would become an integral part of all businesses around the world. As one of the most reputable electronic manufacturers in the Baltic states, our most important goal is to make everything faster than promised and provide the highest Quality. We strive to have all of our products to be one step ahead, while creating based on the cutting-edge technologies and forming the Internet of Things market. CATM1 technology brings the next generation of connectivity, making Internet of Things business models more relevant and achievable by lowering costs of maintaining devices and ensuring reliable and efficient connectivity. Everyone is discussing and speaking about it, guessing how devices will look like and operate in real time. Well... we did the thinking for you and now we can easily say – FM36M1 solution suites perfectly for you.

## What is CATM1?

Category M1 (Cat M1) is a technology that functions on a 1.4 MHz (reduced from 20 MHz) spectrum, has a transmit power of 20dBm, and provides average upload speeds between 200kbps and 400 kbps. This technology can extend battery life, potentially by up to 10 years, depending on battery capacity.

## Coverage, security, variety and efficiency

FM36M1 device will work on licensed spectrum which provides a secure and private network. It is important because it extends LTE's market reach while in the same time lowering the

costs to the minimum with lower data plans and providing you the variety for choosing what you really need. Since this technology evolving FM36M1 will have a 2G fallback which means it will easily work on 2G network and if in worst case scenario there will not be any connectivity, 2G will backup and you will be always up to date.

## Cost-effective with all LTE advantages

Our device FM36M1 using all the advantages of the LTE network, while the costs drops comparing to other LTE or even 3G devices. This will make it the most efficient especially when installing a big amount of devices and required to have a very low cost per unit. Efficiency is also reflected in coverage. Current coverage struggles with in-building or underground areas. We expect that current LTE coverage combined with modem and our FM36M1 will support in-building or underground areas connectivity coverage.

## Teltonika solutions for custom Telematics devices

There will always be companies which are looking for different design of telematics box or dongle. Teltonika offers platform for future projects and wide portfolio of present Telematics solutions. More details always available on request for further discussions.

## Key features

- LTE CATM1 module
- Integrated LTE and GNSS antennas
- Teltonika CAN adapter support
- External peripherals connection
- Integrated scenarios (Green driving, immobilizer, overspeeding, jamming detection, excessive Idling)

# FM36M1 PRODUCT DETAILS

Module	Quectel LTE BG96 Cat.M1/ NB1 & EGPRS
Processor	STM32F103VDH6
2G/LTE bands	FDD-LTE: B1/ B2/ B3/ B4/ B5/ B8/ B12/ B13/ B18/B19/ B20/ B26/ B28 TDD-LTE: B39 (for Cat.M1 only) GSM/GPRS bands: 850/ 900/ 1800/ 1900MHz
Cellular data features	LTE FDD: CATM1 (375kbps DL, 375kbps UL) LTE TDD: CATM1 (375kbps DL, 375kbps UL)
GNSS	GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS, AGPS
Operating temperature	-25°C – +75°C
Back-up battery	170mAh
Accelerometer/Gyroscope	3-axis, 50 Hz accelerometer
Power	10V – 32V DC
USB	USB 2.0 host
Dimensions	L (77mm) x W (62mm) x H (19mm)
Functions	Multiple I/O (DIN, DOUT, AIN, 1-Wire) FOTA (configuration and firmware upload) Eco driving/ Crash detection Teltonika CAN adapter support
Market	–
Certifications	PTCRB, FCC, CE, E-mark, IC (coming soon)