USB GPS RECEIVER

BU-353N5

PRODUCT SPECIFICATION V1.0

Features:

MediaTek high sensitivity solution
Very high chipset sensitivity (Tracking Sensitivity: -165 dBm)
Extremely fast TTFF (Time To First Fix) at low signal level
Support NMEA 0183 data protocol
Built-in Backup power to reserve system data for rapid satellite acquisition
Built-in patch antenna
Super-cohesive magnetic for mounting on the car
Water resisted and non-slip on the bottom
USB interface connection port
LED indicator for GPS fix or not fix

LED OFF:	Receiver switch off
LED ON:	No fixed, Signal searching
LED Flashing:	Position Fixed

Specification:

General

Chipset	MediaTek AG3335MN
Frequency	GPS, Galileo, QZSS, SBAS : L1, 1575.42 MHz, C/A code
	GLONASS : L1, 1602 MHz
	BeiDou : B1, 1561.098 MHz
C/A code	1.023 MHz chip rate
Channels	75 track verification channels
Sensitivity	Tracking: -165 dBm

Accuracy

Position	3 meters, 2D RMS
	2.5 meters, 2D RMS, SBAS enabled
Velocity	0.01 m/s
Time	1us synchronized to GPS time

Datum

Default	WGS-84

Acquisition Time

Reacquisition   0.1 sec., average
Hot start   < 1 sec., average
Cold start   < 33 sec
                       < 15 sec with AGPS

Dynamic Conditions

Altitude   18,000 meters (60,000 feet) max
Velocity   515 meters /second (1000 knots) max
Acceleration   Less than 4g
Jerk   20m/sec

Power

Main power input   4.5V ~ 6.5V DC input
Power consumption   42mA @5V

Protocol

Electrical level   Output voltage level: 0V ~ 2.85V
Baud rate   4800 bps, 8 data bits, no parity, 1 stop bit
Output message   NMEA 0183 GGA, GSA, GSV, RMC,
                       GLL, VTG, ZDA, GRS, GST

Physical Characteristics

Dimension   53mm diameter, 19.2mm height
Cable Length   1.5M
Operating temperature -40℃ to +85℃

Reversion history

Reversion	Date	Name	Status / Comments
V1.0	2021/10/21	Ray Tsai	Initial Version