

# FV-M7 “GPS Receiver Module”

**Overview:**

The main goal of FV-M7 is that it is used as part of an integrated system, which can be a simple PVT (Position Velocity Time) system, for instance a G-mouse, Personal navigation Device or a complex wireless system such as a system with GPRS function.

The module is excellent in performance, sensitivity, power consumption, good start-up time, position accuracy and the size of the module.



**Features:**

MTK-3301 GPS Chipset

With MCX Antenna connector

32 parallel channels

High sensitive -158dbm

Up to 5Hz Update Rate

Low power consumption

Power supply 3.3 +-5%

Low power consumption

Pin Number	Name	Description	Type
1	GND	Ground	
2	VBAT	Backup Battery	Input
3	VDC	3.3-5V DC Power Input	Input
4	PBRES	Push Button Reset Input (Active Low)	Input
5	GPI01	Reserved	
6	TXA	Serial Data Output A (GPS Data)	Output
7	RXA	Serial Data Input A (Command)	Input
8	GND	Ground	
9	GND	Ground	
10	RXB	RTCM IN	Input
11	TIMEMARK	1PPS Time Mark Output	Output
12	GND	Ground	

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**Application:**

GPS-enabled handheld or AVL applications

## **Specification FV-M7 GPS Receiver Module:**

<b>PHYSICAL CONSTRUCTION :</b>		<b>PERFORMANCE :</b>	
Dimension	L 40.5 mm W 35.0 mm H 13.7 mm	Sensitivity	-158dbm
Weight	15 gram	Receiver architecture	32 parallel channels
Receiving frequency	1575.42MHZ; C/A code	Start-up time	Hot start 1 sec typ.
Mounting	SMD		Warm start 35 sec typ.
Construction	12 pin connector with 1.27 mm pitch		Cold start 41 sec typ.
<b>ENVIRONMENTAL CONDITIONS :</b>		Position accuracy	Without aid 3.3 m CEP
Temperature	Operating: -30° ~ + 80°		With SBAS 2.60 m
		Storage: -40° ~ + 85°	Velocity
<b>COMMUNICATION :</b>		Update Rate	1 ~ 5Hz
Protocol	NMEA V3.00	External Antenna	GPS antenna with 2.8V power input
Signal level	RS232 +/-13.2 V UART @ 2.8V	Power Supply	3,3V ~ 5V +- 5%
<b>INTERFACE CAPABILITY :</b>		Current Consumption	Acquisition: 68mA
Output Sentences	Standard		Tracking
	Option	GGA, RMC, GSV*5, GSA*5, VTG GLL,ZDA	
		Baud Rate	9600 bps (default) & 4800/9600/38400/57600/115200 bps are adjustable

**This specification is subject to change without prior notice..**