



裕中企業股份有限公司
YUECHUNG INTERNATIONAL CORP.
裕筌電子(深圳)有限公司
YUECHUNG ELECTRONICS(SHENZHEN)CO.,LTD.

Features:

MediaTek high performance GPS Chip Set
66-channel MediaTek engine with over 1 million effective correlators
Very high sensitivity (Tracking Sensitivity: -165 dBm)
Extremely fast TTFF (Time To First Fix) at low signal level
<1 second Time To First Fix for Hot and Aided Starts
Support NMEA 0183 data protocol
Built-in SuperCap to reserve system data for rapid satellite acquisition
Built-in patch antenna
LED indicator for GPS fix or not fix
LEDOFF: Receiver switch off
LED ON: No fixed, Signal searching
LED Flashing: Position Fixed

Specification:

General

Chipset	MediaTek MT3337
Frequency	L1, 1575.42 MHz
code	C/A code
Channels	66 channel
Sensitivity	-162 dBm

Accuracy

Position	Autonomous:<3m average SBAS:<2.5m average
Max. Velocity	<515 m/s

Acquisition Time

Aided start	<1second,average
Reacquisition	<1second,average
Hot start	1second,average
Cold start	32second,average



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Dynamic Conditions

Altitude	50000 meters max
Velocity	515 meters /second (1000 knots) max
Acceleration	Less than 4g

Power

Main power input	4.5V ~ 6.5V DC input
Power consumption	Acquisition: 26mA Tracking: 18mA

Interface

Interface	TTL Level or RS232
Baud rate	4,800 bps/9,600bps/38,400bps

Protocol

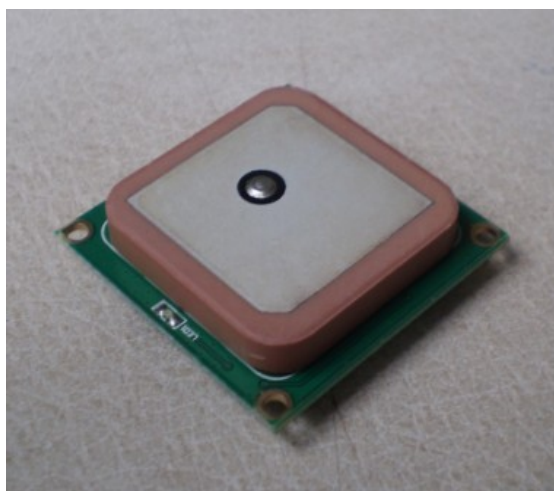
Output message	NMEA 0183 GGA, GSA, GSV, RMC, VTG, GLL
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Physical Characteristics

Dimension	30mm*30mm*8.0mm \pm 0.3mm
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Operating temperature

-40°C to +85°C





Technical drawing of the LED module showing three views: top, side, and front. The top view shows a square module with dimensions 30±0.2 mm by 30±0.2 mm. It features a central circular hole with a radius of R2.25 mm and four corner holes with a radius of R1.75 mm. The side view shows a thickness of 2.2 mm. The front view shows a rectangular module with dimensions 15 mm by 4.08 mm. It includes four mounting holes with a diameter of 1.6 mm and four corner holes with a radius of R1.75 mm. The drawing also shows the LED chip and its dimensions.

Pin #	Name	Type	Description
1	VCC	P	Power input
2	RX	I	Data input (TTL level)
3	TX	O	Data output (TTL level)
4	GND	P	Ground



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Pin description:

VCC:

This is the main DC supply for a 4.5V ~6.5 DC input power.

RX:

This is the main transmits channel for outputting navigation and measurement data to user's navigation software or user written software.

TX:

This is the main receive channel for receiving software commands to the engine board from u-center software or from user written software.

GND:

GND provides the ground for the engine board. Connect all grounds.