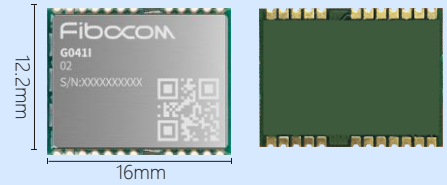


# Fibocom G041I

**Standard Precision** Dual-band GNSS Module with Dead Reckoning



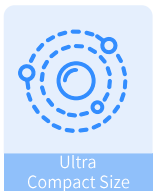
Fibocom G041I is a dual-band, multi-constellation GNSS module with dead reckoning which supports GPS、 BDS、 QZSS satellite signals.

Combining GNSS positioning and inertial navigation technology, G041I can acquire high-sensitivity positioning, as well as rapid signal tracking and acquisition even under the poor signal areas (such as tunnels, underground parking, etc.), and provide continuous and accurate positioning for navigation applications.

Besides, AGNSS can enhance the sensibility of acquisition in shorter time even under weak signal environment. The offline ephemeris feature can extend the operating time to up to 6 days. G041I also provide advanced power management, enabling low-power GNSS sensing and position fix, which makes it suitable for the industrial and consumer applications.

With high sensitivity, high precision and other performance advantages, G041I is an ideal solution for automotive navigation, lane-level navigation, fleet management services..

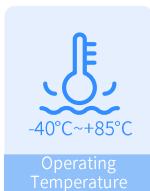
## Key Features



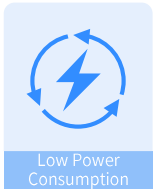
Ultra Compact Size



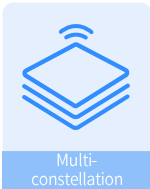
Multi GNSS



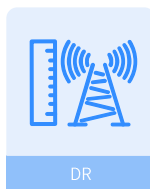
-40°C~+85°C  
Operating Temperature



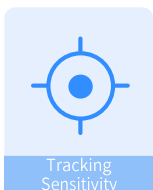
Low Power Consumption



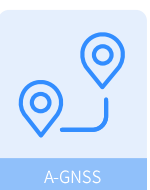
Multi-constellation



DR



Tracking Sensitivity



A-GNSS

- GNSS and INS navigation technology
- Submeter-level GNSS positioning
- Build-in 6D IMU, 3-axis accelerometer
- Integrated AGNSS function
- Support other sensors access for multi-source information fusion
- Support free installation



GNSS		G041I															
<b>General Specifications</b>																	
Package	24 PIN LCC																
Dimensions(mm)	12.2*16.0*2.4mm																
Weight	Approx. 0.9g																
Position Accuracy	GNSS 1.0m CEP																
<b>GNSS Features</b>																	
Product	GPS/QZSS					BDS					GLONASS		Galileo			IRNSS	
	L1C/A	L1C	L2C	L5	L6	B1I	B1C	B2I	B2a	B3I	L1OF	L2	E1	E5a	E6	L5	
G041I-02	●			●		●			●								
Accuracy	Sub-Meter																
Position update	1 Hz																
Sensor output	50Hz																
TTFF	Hot Start: 1s Cold Start: 30s																
Power Consumption	Acquisition: <a href="#">54mA@3.3V</a> Tracking: <a href="#">50mA@3.3V</a> Standby: <a href="#">12uA@3.3V</a>																
Operating temperature	-40°C ~ +85°C																
<b>Sensitivity</b>																	
Cold start	-148dBm																
Hot start	-155dBm																
Reacquisition	-158dBm																
Tracking & Navigation	-160dBm																
Velocity & Time Accuracy	GNSS: 0.1m/s CEP 1PPS: 20ns																
<b>Operating Condition</b>																	
Main voltage	3.0~3.6V																
Digital I/O voltage	3.8~3.6V																
Backup voltage	1.8~3.6V																
<b>Operation Limit</b>																	
Velocity	515m/s																
Altitude	18,000m																
<b>Features</b>																	
D-GNSS	●																
Build in SAW	●																
Build in LNA	●																
Oscillator	T																
<b>Interface</b>																	
UART	●																
SPI	*																
I2C	*																
<b>Certifications</b>																	
Regulatory	RoHS&REACH																

\* =特殊固件支持

