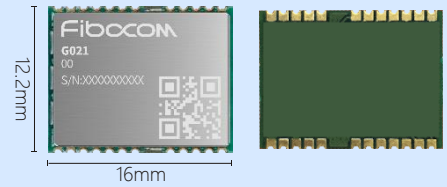


Fibocom G021

Standard Precision Multi-band Standard-precision GNSS Positioning Module

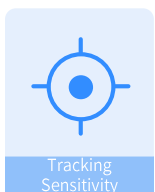


Fibocom G021 is dual-band, multi-constellation positioning module, which can receive and track various signals of civil-navigation satellite systems, including GPS, BDS, GLONASS, Galileo, NAVIC/IRNSS, QZSS and SBAS(WAAS, EGNOS, GAGAN and MSAS), and dual-band (L1+L5, B11+B2a etc.) positioning. Compared with single band (L1) positioning module, G021 can significantly decrease the multipath effect of urban valley by tracking L1+L5 band form several visible satellites, and improve the accuracy of positioning.

G020 integrates LNA and SAW Filter to implement high sensitivity and high-precision positioning even in the poor signal environment, as well as fast signal tracking and acquisition. Besides, G020 is able to minimize the time of first-positioning enabled by AGNSS.

It's an ideal solution for commercial electronic navigation, vehicle navigation and vehicle monitoring, etc. with the advantages of compact size and high sensitivity.

Key Features



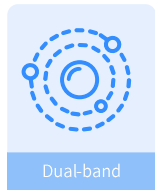
Tracking Sensitivity



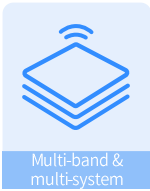
Multi-satellite GNSS



Operation temperature
-40°C~+85°C



Dual-band



Multi-band & multi-system

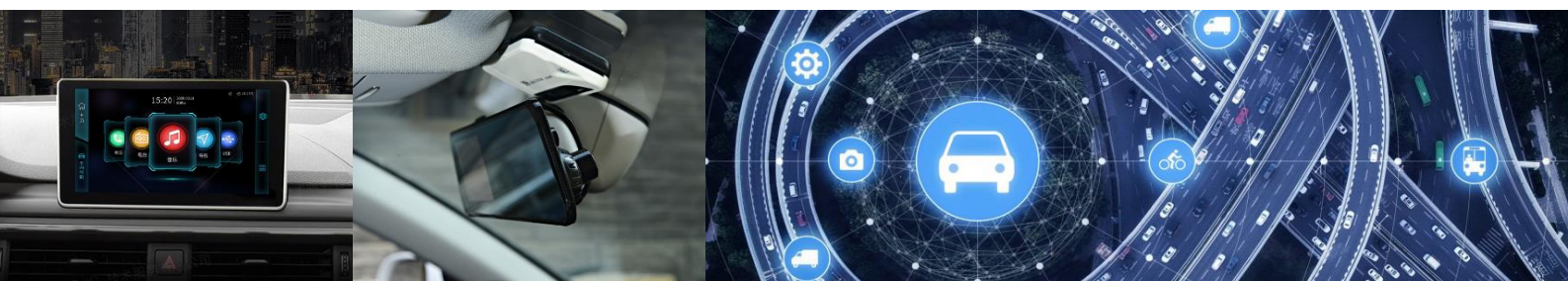


RoHS Standard



Anti-interference

- Support Multi-satellite System: GPS, GLONASS, BDS, Galileo, QZSS and SBAS
- Support multi-frequency GNSS: L1&L5
- Built-in dual SAW Filter, strengthen anti-jam capabilities
- Supports A-GNSS feature
- Multi-band active interference cancellation technique, enhance the ability of anti-interference
- Highly-Integrate surface-mount model, the best cost-effective high-precision positioning solution



GNSS		G021-00															
General Specifications																	
Package	24 PIN LCC																
Dimensions (mm)	12.2*16.0*2.4mm																
Weight	Approximate 0.9g																
Position Accuracy	GNSS <1m CEP																
GNSS Features																	
Product Model	GPS/QZSS					BDS					GLONASS		Galileo			IRNSS	
	L1C/A	L1C	L2C	L5C	L6	B1I	B1C	B2I	B2a	B3I	L1	L2	E1	E5a	E6	L5	
G020-00	●			●		●			●		●		●	●		*	
Accuracy	Sub-meter																
GNSS Tracking Channels	40																
Update Rate	10Hz maximum																
Time to First Fix (TTFF)	Cold Start: 1s Hot Start: 32s																
Power Consumption	GPS+QZSS (L1): 22mA@3.3V GNSS (L1+L5): 41mA@3.3V Standby: 12uA@3.3V																
Antenna	Active antenna, Passive antenna																
Operation Temperature	-40°C - +85°C																
Safety Supervision	Antenna open circuit Detection & short circuit protection																
Sensitivity																	
Cold Start	-148dBm																
Hot Start	-155dBm																
Reacquisition	-158dBm																
Tracking	-162dBm																
Velocity & Time Accuracy	GNSS: 0.1m/s CEP 1PPS: 20ns																
Operating Condition																	
Main voltage	2.0~3.6V																
Digital I/O voltage	1.8~3.6V																
Backup voltage	1.8~3.6V																
Operation Limit																	
Velocity	515m/s																
Altitude	18,000m																
Features																	
LNA	●																
Data Logging	●																
Programmable (Flash)	●																
D-GNSS	●																
Interfaces																	
UART	●																
USB	*																
SPI	*																
I2C	*																
Certification																	
Certification	RoHS & REACH																
* =Supported upon request with special firmware																	

