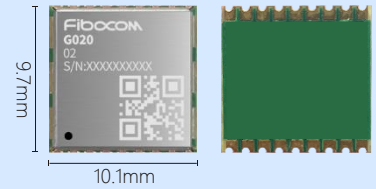


# Fibocom G020

**Standard Precision** Multi-band GNSS Standard Precision Positioning Module

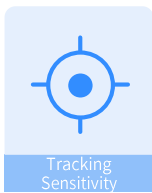
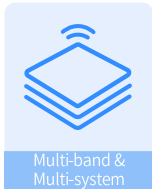
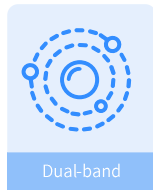
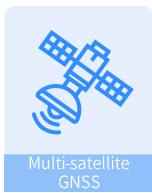
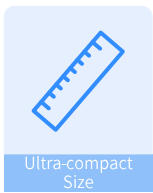


Fibocom G020 is dual-band, multi-constellation positioning module, which can receive and track various signals of civil-navigation satellite systems including GPS, BeiDou, GLONASS, Galileo, NAVIC/IRNSS, QZSS, SBAS(WAAS、EGNOS、GAGAN and MSAS), and dual-frequency (L1+L5、B11+B2a etc.). Compared with single band (L1) positioning module, G020 can significantly decrease the multipath effect of urban valley by tracking L1+L5 band from several visible satellites, and improve the accuracy of positioning.

G020 integrates LNA and SAW Filter to implement high sensitivity and high 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



- Compact Size, Low Power Consumption, Highly Cost-effective
- Support Multi-satellite System: GPS、GLONASS、BDS、Galileo、QZSS and SBAS
- Built-in dual SAW Filter, strengthen anti-jam capabilities
- Built-in Low Noise Amplifier(LNA), enhance receiving sensitivity
- Supports A-GNSS feature
- Multi-frequency active interference cancellation technique, enhance the ability of anti-interference



GNSS		G020-00															
<b>General Specifications</b>																	
Package	18 PIN LCC																
Dimensions (mm)	10.1*9.7*2.5mm																
Weight	Approximate 0.5g																
Position Accuracy	GNSS <1m CEP																
<b>GNSS Features</b>																	
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: 24s																
Power Consumption	GPS+QZSS (L1): 22mA@3.3V GNSS (L1+L5): 41mA@3.3V Standby: 14uA@3.3V																
Antenna	Active antenna, Passive antenna																
Operation Temperature	-40°C - +85°C																
SafetySupervision	Antenna open circuit Detection & short circuit protection																
<b>Sensitivity</b>																	
Cold Start	-148dBm																
Hot Start	-155dBm																
Reacquisition	-158dBm																
Tracking	-161dBm																
Velocity & Time Accuracy	GNSS: 0.1m/s CEP 1PPS: 20ns																
<b>Operating Condition</b>																	
Main voltage	2.0~3.6V																
Digital I/O voltage	1.8~3.6V																
Backup voltage	1.8~3.6V																
<b>Operation Limit</b>																	
Velocity	515m/s																
Altitude	18,000m																
<b>Features</b>																	
LNA	●																
Data Logging	●																
Programmable (Flash)	●																
D-GNSS	●																
<b>Interfaces</b>																	
UART	●																
I2C	*																
<b>Certification</b>																	
Certification	RoHS& REACH																

\* =Supported upon request with special firmware

