



**Size**(L × W × H): 71 mm × 46 mm × 9 mm

**Weight:** 26.6g

# K706 GNSS Module

## MULTI CONSTELLATION GNSS AND SUPERIOR PERFORMANCE

The K706 is a new generation OEM board designed to work with current constellations, which is also firmware upgradable to track satellite signals of upcoming constellations. With the advanced QUANTUM™ technology, it remarkably improves the stability and reliability of positioning accuracy in standalone and RTK modes. Your GNSS solution will never be outdated with the K706 OEM board inside.

## EASY TO INTEGRATE

The K706 is designed for easy integration with rugged reliability. The compact form factor and lower power consumption make it an optimal choice integrated into handheld devices. The I/O and pin definitions are compatible with ComNav K5 series OEM boards, ensuring an easy replacement. With 8GB onboard data storage and WebServer service, the K706 helps you to simplify integration and reduce development time. Supported by our innovative research team, ComNav Technology promises to improve effectivity and profitability for your business.

## DESIGNED FOR DIVERSE APPLICATIONS

As a small-sized and multifunctional OEM board, the K706 has reliable performance in a wide range of applications, such as UAV mapping, machine control, precision agriculture and high accuracy land surveying, especially in handheld RTK devices.

## Features

GPS L1/L2, BeiDou B1/L2, GLONASS L1/L2, Galileo E1/E5b, QZSS

DP-Filter Smooth Function<sup>1</sup>

Advanced QUANTUM™ Technology

WebServer Service

8 GB Onboard Memory

# K706 GNSS Module

K Series GNSS Module Ver.2020.11.30

<b>Signal Tracking</b>	Channels	352
	GPS	L1 C/A, L2C, L2P
	BeiDou	B1, B2
	GLONASS	L1 C/A, L1P, L2 C/A, L2P
	GALILEO	E1,E5b
	QZSS <sup>2</sup>	
<b>Performance Specifications</b>	SBAS	WAAS, EGNOS, MSAS,GAGAN,SDCM
	Cold Start	<50s
	Warm start	<30s
	Hot start	<15s
	RTK Initialization time	<10s
	Signal reacquisition	<1.5s
	Initialization reliability	>99.9%
	Velocity accuracy	0.03 m/s
	Acceleration	4g
	Overload	15g
	Time accuracy	20ns
<b>Positioning Specifications</b>	Post Processing	2.5 mm + 1 ppm Horizontal 5 mm + 1 ppm Vertical
	Single Baseline RTK	8 mm + 1 ppm Horizontal 15 mm + 1 ppm Vertical
	DGPS	<0.4m RMS
	SBAS	1m 3D RMS
	Standalone	1.5m 3D RMS
<b>Communications</b>	LV-TTL	3 , baud rates up to 921600bps
	USB port	1
	LAN Ethernet port	1
	CAN Bus(Reserved)	2
	Pulse Per Second (PPS) output	1
	Event Marker input	2
	LEDs indicating working status	3
<b>Data Format</b>	Correction data I/O	RTCM 2.X, 3.X, CMR(GPS only),CMR+(GPS only)
	Position data output	-ASCII: NMEA-0183 GSV, RMC, HDT, VHD, GGA, GSA, ZDA; PTNL, PJK; PTNL, GGK; PTNL, AVR; NAVPOS - ComNav Binary update to 20Hz - BINEX Data: 0x00, 0x01-01, 0x01-02, 0x01-05, 0x7d-00, 0x7e-00, 0x7f-05 - Position data output rate: 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz
<b>Physical</b>	Size(L × W × H)	71 mm × 46 mm × 9 mm
	I/O interface	2 × 12 pin male connector
	Weight	26.6 g
	Antenna connector	1 × MCX female, 50 Ω
<b>Electrical</b>	Input voltage	+3.3 V ~ +5.5 VDC
	Power consumption	1.68 W
	Memory	8 GB
<b>Environmental</b>	Working temperature	-40 °C to + 80 °C
	Storage temperature	-55° C to + 95 °C
	Humidity	95% no condensation
<b>Software</b>	ComNav Compass Receiver Utility software	
<b>Optional Accessories</b>	AT-series GNSS antenna	
	5 m/10 m RF Cables	
	OEM Board Evaluation Kit	

1. DP-Filter smooth function largely improves the pass to pass accuracy.  
Please refer to white paper for more information.

2. QZSS is reserved for future upgrade.

Specifications subject to change without notice.