

GNSS Performance	BD990 336channels BDS-2:B1I、B2I、B3I BDS-3:B1I、B3I、B1C、B2a、B2b GPS:L1、L1C、L2C、L5、L2P GLONASS: G1、G2、G3 Galileo : E1、E5a、E5b、E6C、AltBOC SBAS : L1 QZSS : L1、L2C、L5 IRNSS : L5	I/O interface	5PIN LEMO: external power and Rs232 Type-C: PD3.0 protocol fast-charge and data transmission UHF Antenna Sim Card Slot
GNSS Feature	Update Rate: Max 50Hz Cold Start: <45s Warm Start: <30s Signal Re-acquisition: <2s	Internal UHF	Power: 3W Working range ≥15km Frequency 410~470MHz Protocol: Farlink, TrimTalk450S, ZHD, SOUTH, HUACE
• Position Accuracy		4G Network	LET FDD: B1/B3/B5/B7/B8/B20 LET TDD: B38/B40/B41 WCDMA: B1/B5/B8 GSM: B3/B8
Static	Horizontal: $\pm (2.5+0.1 \times 10^{-6}D)$ mm Vertical: $\pm (5+0.4 \times 10^{-6}D)$ mm	Bluetooth	BLE Bluetooth 4.0 Bluetooth 2.1 + EDR standard Bluetooth 3.0, Bluetooth 4.2
RTK	Horizontal: $\pm (8+1 \times 10^{-6}D)$ mm Vertical: $\pm (15+1 \times 10^{-6}D)$ mm	NFC	Support
• IMU		WiFi	802.11b/g/n standard
IMU Update Rate	200HZ	• Physical	
Tilt Angle	0°~60°	Dimensions	166.5*95.5mm (R*H)
Accuracy	1.8m Pole : 10 mm + 0.7 mm/°	Weight	1.3KG
• System		Material	Magnesium aluminum alloy
OS	Linux	Temperature	Work Temperature : -25 °C~+65 °C Stock Temperature : -40 °C~+80 °C
Button	Function Button and Power Button	Humidity	100% Condensing
Screen	1.3-Inch TFT LCD Display	Waterproof/ Dustproof	IP68
Indicator	Satellite, DataLink, Bluetooth and Power Indicators	Shock & Vibration	Withstand 2m pole drop, 1.2m drop without pole
WebUI	Support WiFi hotspot and USB to visit WebUI to check receiver information, monitor receiver status and set receiver	Input Voltage	6-28V wide range voltage DC design and overvoltage protection
Voice	Smart iVoice tech: broadcast receiver status and operation Support multiple language: English, Russia, Korean, Portuguese, Spanish and Turkish.	Battery	Internal battery 10000mAh 7.4V
		Battery life	More than 16 hours long working time. External battery/AC power supported
		• Data	
		Memory	8G internal storage
		Transmission Format	USB, FTP, HTTP and etc, Static format : STH, Rinex2.10, Rinex3.02 and so on Reference format : CMR, RTCM2.1, RTCM2.3, RTCM3.0, RTCM3.1, RTCM 3.2 GPS output format : NMEA 0183, binary code Cors protocol : VRS, FKP, MAC, and