



EX30B

GNSS Receiver



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The EX30B is a lightweight, multi-functional base. It integrates a high-precision full-system and full-frequency positioning module, a data radio module, and a long-life lithium battery, providing differential signal coverage within a 5km operating radius for XFIX leveling instruments in off-network environments and expanding the product's application scenarios. With easy setup and professional software integration, it enables simple base deployment and activation; it greatly reduces the skill requirements for on-site operators and improves operational efficiency.

Characteristic

Full-System and Full-Frequency GNSS Positioning Module

The main unit integrates a high-precision positioning module with 1408 high-speed channels, supporting full-system and full-frequency signal reception and processing for BDS (B1I, B2I, B3I, B1C, B2a, B2b), GPS (L1 C/A, L1C, L2C, L5), GLONASS (L1, L2, L3), Galileo (E1, E5a, E5b, E6), QZSS (L1, L2, L5), SBAS and NavIC.



Built-in Data Radio Module

The main unit features a built-in data radio module with an operating frequency of 863–870MHz, delivering a 5km coverage radius for reliable operation in network-free areas.

Ultra-Long Battery Life

With a built-in high-capacity 7.4V 6500 mAh battery, the instrument supports 10-hour of high-intensity operation.



Industrial-Grade Design and Protection

Constructed with a magnesium alloy housing and an industrial-grade protection design, the instrument is IP68-rated for dust and water resistance, withstanding a 1.5m free fall and operating reliably within a temperature range of -20°C to +60°C.

Intuitive and Easy Operation

With easy installation and user-friendly software, base configuration and startup can be completed in minutes. Automatic restart after reboot eliminates the hassle of repeated setup.



ITEM		SPECIFICATION
Channel	Channel	1408
GNSS	GPS	L1 C/A, L1C, L2P(Y), L2C, L5
	GLONASS	L1, L2, L3
	BDS	B1I, B2I, B3I, B1C, B2a, B2b
	Galileo	E1, E5a, E5b, E6
	QZSS	L1, L2, L5
	SBAS	L1
	NavIC(IRNSS)	L5
	Channel Number	1408
	Support Data Format	NMEA-0183
	Correction I/O Protocol	Lightning Fix
	Cold Start	<40s
Positioning Accuracy	Single (RMS)	Horizontal: 1.5m; Vertical: 2.5m
	DGPS(RMS)	Horizontal: 0.4m; Vertical: 0.8m
	RTK(RMS)	Horizontal: $\pm(8\text{mm}+1\text{ppm})$; Vertical: $\pm(15\text{mm}+1\text{ppm})$
	Time Accuracy(RMS)	20ns
System Platform	Bluetooth	BR+EDR+BLE
	Data Radio	Transceiver-integrated radio Frequency: 863~870MHz or 902~928MHz Power: H/L Protocol: CSS Air Rate: 11000, 62500bps
Indicator Light	Power Indicator	Steady green light (Operation): Normal operation Flashing red light (Operation): Low battery Steady green light (Charging): Charging completed Steady red light (Charging): Charging in progress
	Satellite Indicator	Flashing: Satellite Signal Acquired
	Differential Data Indicator	Flashing when base starts and sends differential data
Battery & Power Supply	Capacity	7.4V 6500 mAh
	Battery Life	More than 10 Hours
	Charging Specification	Supports USB PD@15V/2A DCP@5V/3A
Environmental Characteristics	Operating Temperature	-20°C to +60°C
	Storage Temperature	-20°C to +70°C
	Drop Proof	1.5m free-fall resistant
	IP Rating	IP68-rated (dust and water resistance)



Physical Characteristics	Material	Magnesium alloy housing + ABS/PC plastic top cover
	Dimensions	Φ134mm * 86mm
	Weight	≤750g
Accessories	EX30B Main Unit	1 Unit
	PD Charger(Option: EU/GB)	1 Piece
	Charging Cable	1 Piece
	Radio Antenna	1 Piece
	Base Connector	1 Piece
	Extension Rod	1 Piece
	QC Certificate	1 Piece

Manufacturers may update parameters at any time, please refer to the latest product information.