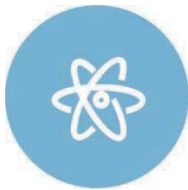




Features



"Athena" RTK engine,



ATLAS



aRTK



Intelligent Voice



Smart Base Station



WebUI



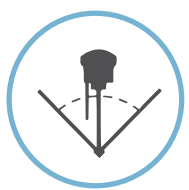
Intelligent System



As solid as a rock



Cloud Services



IMU Tilt Survey



Combined Antenna



Dual Batteries  
Dual insurance

# Technical Specifications

Product model		A90 ZX	A90 ZH
GNSS	Channels	<b>336 channels</b>	<b>800 channels</b>
	Satellite Signals	GPS: L1 C/A, L2E, L2C, L5 BDS: B1, B2, B3 GLONASS: L1 C/A, L2 C/A, L3 Galileo: E1, E5A, E5B, E5AltBOC, E6 QZSS: L1 C/A, L1 SAIF, L1C, L2C, L5, LEX SBAS: L1 C/A, L5 MSS L-Band: Trimble RTX IRNSS L5	GPS: L1C/A, L1C, L1P, L2C, L2P, L5; GLONASS: G1P1, G1OC, G2OC, G2P2, G3OC BDS: B1I, B2I, B3I, B1C, B2a, B2b, ACEBOC; Galileo: E1BC, E5a, E5b, ALTBOC, E6 QZSS: L1C/A, L1C, L2C, L5, LEX; SBAS: L1, L5; IRNSS: L5; L-Band
Accuracy	Static	H: $\pm (2.5\text{mm} + 0.5 \times 10^{-6} \cdot D)$ RMS, V: $\pm (5\text{mm} + 0.5 \times 10^{-6} \cdot D)$ RMS	
	RTK	H: $\pm (8\text{mm} + 0.5 \times 10^{-6} \cdot D)$ RMS, V: $\pm (15\text{mm} + 0.5 \times 10^{-6} \cdot D)$ RMS	
	DGNSS	<0.5m	
	ATLAS H10	8cm	
	Initialization Time	8s	
	Initialization Reliable	99.9%	
System	OS	Linux	
	Memory	8GB, support expandable MicroSD 32G	
	Wi-Fi	802.11 b/g/n, support WebUI management: update, data download, operation setting and etc.	
	Bluetooth	V2.1+EDR/V4.1Dual, Class2	
	E-Bubble	Support	
	IMU Tilt Survey	Fusion positioning, 400Hz refresh rate, 2cm (@60°Tilt degree)	
Datalink	Audio	support TTS audio broadcast	
	UHF radio	Tx/Rx Internal Radio, 0.5W/2W adjustable, 410-470MHz	
	Radio protocol	Support GeoTalk, SATEL, PCC-EOT, TrimTalk 450S, TrimMark III, South, Hi-Target and etc.	
	Network	4G-LTE, TE-SCDMA, CDMA(EVDO 2000), WCDMA, GSM(GPRS)	
Physical	Reference outputs	RTCM2.3, RTCM3.2, RTCM3.X, CMR, CMR+, ROX and etc.	
	Interface	1*TNC Radio Antenna, 1*5Pin(Power & RS232), 1*7Pin (USB 81 RS232)	
	Button	1 Power Button	
	Indication Light	4 Indication Lights	
	Size	$\Phi 156\text{mm} \times H76\text{mm}$	
Power supply	Weight	1.2kg	
	Battery capacity	7.4V, 24.5Wh(standard two batteries:3400mAH*2)	
	Life Timer	Static Survey: 15 hours, Rover RTK survey: 12h	
	External power source	DC 9-18V, with overvoltage protection	
Environment	Work Temperature	$-35^{\circ}\text{C} \sim +65^{\circ}\text{C}$	
	Storage Temperature	$-55^{\circ}\text{C} \sim +85^{\circ}\text{C}$	
	Waterproof & dustproof	IP68	
	Humidity	100% anti-condensation	



## Forest it Design

Forest it Design is a leading provider of rugged mobile computers, all-in-One PC:s, measurement instruments and GPS/GNSS solutions. The company has offices in Sweden, UK, Germany and Finland.

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