

最先进的 海洋解决方案

Navsight海洋解决方案集成了最先进的IMU和GNSS技术，为水文测量人员提供了一个现代化的、强大且易于使用的运动和导航解决方案。



每种应用领域的可扩展性

EKINOX GRADE



经济划算

浅水应用的理想选择

- » 0.02° Roll/Pitch
 - » 0.05 ° Heading
 - » 5 cm Real-time Heave
 - » 2.5 cm Delayed Heave
 - » Up to 1 cm RTK Position
- Low Power Consumption
Compact, Lightweight

APOGEE GRADE



用途广泛

适用于具有挑战性的浅水到深水应用

- » 0.008° Roll/Pitch
 - » 0.025 ° Heading
 - » 5 cm Real-time Heave
 - » 2 cm Delayed Heave
 - » Up to 1 cm RTK Position
- Amazing performance under
GNSS Outage

HORIZON GRADE



FOG技术

动力低、条件恶劣的大型船舶

- » 0.007° Roll/Pitch
 - » 0.01 ° Heading
 - » 5 cm Real-time Heave
 - » 2 cm Delayed Heave
 - » Up to 1 cm RTK Position
- Very Low Drift
Single antenna Heading Capable

All parameters apply to -20 to 60°C temperature range, unless otherwise stated.

Full specifications can be found in the Navsight Hardware Manual available upon request.

IHO Compliant

惯性测量单元 (IMU)

IMU	 Ekinox-I Surface	 Ekinox-I Subsea Enclosure	 Apogee-I Surface	 Apogee-I Subsea Enclosure	 Horizon-I Surface
Size	86 x 100 x 58 mm	94 x 94 x 112 mm	130 x 100 x 58 mm	94 x 94 x 177 mm	150 x 168 x 215 mm
Weight	425 g	1 kg	635 g	1.32 kg	4.29 kg
Rating	IP68	200 m Depth	IP68	200 m Depth	IP68

OEM Versions available upon request

EKINOX ACCURACY

	RTK**	PPK***	RTK Outage (30 s)	PPK Outage (30 s)
Roll, Pitch	0.02 °	0.015 °	0.05 °	0.04 °
Heading* - 2 m / 4m	0.08 ° / 0.05 °	0.03 ° / 0.03 °	0.15 ° / 0.13 °	0.05 ° / 0.05 °
Position (X,Y) / Altitude (Z)	0.01 m / 0.02 m	0.01 m / 0.02 m	3 m / 0.75 m	1 m / 0.3 m

APOGEE ACCURACY

	RTK**	PPK***	RTK Outage (60 s)	PPK Outage (60 s)
Roll, Pitch	0.008 °	0.005 °	0.012 °	0.008 °
Heading* - 2 m / 4 m	0.04 ° / 0.025 °	0.02 ° / 0.02 °	0.05 ° / 0.04 °	0.025 ° / 0.025 °
Position (X,Y) / Altitude (Z)	0.01 m / 0.02 m	0.01 m / 0.02 m	4 m / 0.75 m	0.15 m / 0.05 m

HORIZON ACCURACY

	RTK**	PPK***	RTK Outage (60 s)	PPK Outage (60 s)
Roll, Pitch	0.007 °	0.004 °	0.01 °	0.005 °
Heading* - 2 m	0.01 °	0.008 °	0.015 °	0.01 °
Position (X,Y) / Altitude (Z)	0.01 m / 0.02 m	0.01 m / 0.02 m	1 m / 0.5 m	0.1 m / 0.05 m

升沉

	Ekinox	Apogee / Horizon	Wave period	Remarks
Real-time Heave	5 cm	5 cm	up to 20 sec	Automatic adjustment to the sea state
Delayed Heave	2.5 cm	2 cm	up to 40 sec	Internal computation

速度辅助定位

DVL < 0.2 % Travelled distance

Navsight处理单元



Three modes available:

MRU	INS with GNSS	INS + external GNSS
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物理特性及环境参数

Size (Rugged / Rack)	227 x 156 x 63 mm / 422 x 204 x 44 mm
Weight (Rugged / Rack)	1.9 kg / 1.95 kg
Wide input voltage range (isolated)	9 - 36V
EN-60945 compliant	Isolated Interfaces and power supply
Power consumption	<3 W, <7W with GNSS
Operating Temperature	-40 to 75°C
MTBF	50,000 hours

接口

Aiding Sensors (input)	2X GNSS, RTCM, DVL
Protocols	Output: NMEA, ASCII, Binary, TSS, Simrad Input: NMEA, Trimble, Novatel, Septentrio, Hemisphere, Veripos, Fugro, PDO, PD6
Logging Capacity	8 GB ≈ 48h, 200 Hz
Ports/Communication	5x RS-232/RS-422 Tx/Rx ports
Synchronization	2x Sync Out (PPS) + 5x Sync In signals
Ethernet	5x UDP / TCP bidirectional ports Web interface, FTP

内部接收机

Internal GNSS Receiver	GPS, GLONASS, GALILEO, BEIDOU, L1/L1/L5, RTK (option)
PPP Ready	Omnistar/Marinestar or Veripos/Terrastar

*Baseline, dual antenna **Real Time Kinematic ***Post-processing Kinematic
RMS values for typical survey trajectories. Performance depends on velocity aiding accuracy. Performance may be affected by atmospheric conditions, signal multipath, and satellite geometry. All specifications subject to change without notice.