

GPS AND IMU DEVICES

	DS-GPS-CLOCK	DS-VGPS-HS/HSC	DS-IMU1	DS-IMU2	DS-GYRO3
NAVIGATION					
Standalone/SBAS/RTK (horizontal positioning)	2.5 m	1.2 m	2 m	1.2 m	-
Velocity accuracy	0.05 m/s	0.02 m/s	0.05 m/s	0.007 m/s	-
Roll & Pitch accuracy (dynamic)	-	-	0.1 °	0.1 °	0.1 °
Heading accuracy (dynamic with GNSS)	-	-	0.2 °	0.1 °	0.1 °
Slip angle accuracy	-	-	0.3 °	0.1 °	-
Output data rate	10 Hz	20/100 Hz	Up to 100 Hz	Up to 500 Hz	up to 1600 Hz
GNSS					
Supported navigation systems	GPS L1, GLONASS L1	GPS L1, L2* GLONASS L1, L2*	GPS L1C/A, GLONASS L1OF, BeiDou B1I	GPS L1, L2*, L5* GLONASS L1, L2*, GALILEO E1*, E5*, BeiDou B1*, B2*	-
Supported SBAS systems	SBAS L1	WAAS, EGNOS, MSAS, GAGAN, QZSS	-	WAAS, EGNOS, MSAS, GAGAN, QZSS, Omnistar HP/XP/B2, Trimble RTX	-
ADDITIONAL FEATURES					
Dual antenna heading	-	-	-	✓	-
RTK positioning	-	✓	✓	✓	-
HARDWARE					
Operating voltage	5 V *USB powered	9 to 36 V	5 to 36 V *USB powered	9 to 36 V	5 V *USB powered
Operating temperatures	-5 °C to 75 °C	0 °C to 60 °C	-40 °C to 85 °C	-40 °C to 85 °C	-40 °C to 85 °C
INERTIAL SENSORS					
Accelerometers	-	-	✓	✓	✓
Gyroscope	-	-	✓	✓	✓
Magnetometer	-	-	✓	✓	✓



USB, CAN, RS232

GPS instruments offer a variety of data connection interfaces from USB, CAN and RS232.

RTK 1 CM ACCURACY

Optional RTK upgrade of all GPS and IMU units, improving positioning accuracy down to 1 cm.

INERTIAL MEASUREMENT UNITS

Very rugged IMU units - IP67 degree of protection - which in addition to GPS receivers have an integrated 3-axis accelerometer and 3-axis gyroscope to improve dead reckoning.

High accuracy 100Hz GPS receivers and Inertial Measurement Units (IMU) with Real-time Kinematics (RTK) support for the most precise position based test and measurement applications.