BU-353 GPS/GLONASS Receiver Specification

BU-353 GLONASS SPECIFICATION

Electrical Characteristics(Receiver)

GPS Chipset	High performance CHIP
Frequency	L1, 1575.42 MHz
C/A Code	1.023 MHz chip rate
Channels	Support 33 tracking / 99 acquisitions - channel
Sensitivity	-165dBm

Accuracy

Position Horizontal	< 2.5m 2D RMS SBAS Enable
Velocity	0.1 m/sec 95% (SA off)
Time	1 micro-second synchronized to GPS time
WASS	Enable for North America products

Datum

Datum	WGS-84

Acquisition Rate

Hot start	1sec., average (with ephemeris and almanac valid)
Warm start	35sec., average (with almanac but not ephemeris)
Cold start	35sec., average (neither almanac nor ephemeris)
Reacquisition	0.1sec., average (interruption recovery time)

Protocol

GPS Protocol	NMEA 0183
	NMEA 0183 V3.0 protocol, and supports command:
GPS Output Data	GGA, GSA, GSV, RMC, VTG, GLL (VTG and GLL are optional)
	Software command setting (Default: 115200,n,8,1 for NMEA)

Dynamic Condition

Acceleration Limit	Less than 4G
Altitude Limit	18,000 meters (60,000 feet) max.
Velocity Limit	515 meters/sec. (1,000 knots) max.
Jerk Limit	20m/sec**3

Temperature

Operating	-40℃ ~ 80℃
Storage	-40℃ ~ 80℃
Humidity	Up to 95% non-condensing

Power

Voltage	5V ±5%
Current	25mA typical

Physical Characteristics

Dimension	2.32” x 1.65” x 0.82” (59mm x 47mm x 21mm))
USB Cable Length	60” (152 cm)

Low Noise Amp

Amplifier Gain w/out cable	20dB Typical
Filtering	-25dB (+100MHz)
Output VSWR	2.0 Max.
Voltage	DC 3 ~ 5.0V
Current	15mA max @ 5VDC