GG24 Surveyor GPS+GLONASS

Manufacturer: Astech

Real time position accuracy:

autonomous	**CEP (50 %)**	**95%**
GPS+GLONASS	7 m	16 m
GPS-only	25 m	100 m
GLONASS-only	8 m	20 m
differential	**CEP (50 %)**	**95 %**
GPS+GLONASS	35 cm	75 cm
GPS-only	50cm	1 m

Velocity accuracy (knots):

autonomous	**mean**	**95 %**
GPS+GLONASS	0.15	0.30
GPS-only	1	4
GLONASS-only	0.03	0.05
differential	**mean**	**95 %**
GPS+GLONASS	0.04	0.10
GPS-only	0.05	0.10
GLONASS-only	0.02	0.05

GG24 standard features:

-12 channels L1 GPS code & carrier
-12 channels L1 GLONASS code & carrier
-raw data output (code & carrier)
-strobe correlator multipath mitigation
-30-second warm start (typical)
-40-second cold start (typical)
-2-second re-acquisition time (dynamic independent)
-geoid and magnetic variation models
-receiver autonomous integrity monitoring (RAIM)
-standard NMEA-0183 V2.01 output

1PPS timing signal (5V TTL)	accuracy:	45ns(differential)
		70ns (stand-alone)

-user-selectable standard datums
-user-defineable datum

GG24 remote features:

GG24 standard features and:
-differential remote RTCM V2.1 message types 1,2,3,6,9,16, and 31,32,34,37 (from future V2.2)
-position and raw data update rates user-selectable up to 2 Hz

GG24 base station features:

GG24 standard and:
-differential GPS reference station RTCM V2.1 message types 1,2,3,6,9,16 and 31,32,34,37, (from future V2.2)
-position and raw data update rates up to 2 Hz

Optional features:

-external reference frequency input
-software toolkit

Communications:

-3 bi-directional RS232 serial ports; up to 115,000 bps

Antenna:

Each GG24 receiver uses one antenna to receive both GPS and GLONASS signals. The antenna connects through a single antenna port on the GG24 receiver.

Physical & environmental:

operating temp		-30 to 55 C
storage temp		-40 to 85 C
power consumption	2.6 W (receiwer)	0.3 W (typ, antenna)
input voltage		6-15 VDC
weight		3.4 lbs
dimensions		172mmW x 48mmH x 225mm D
	water resistance:	
wind-driven rain		MILSPEC 810E
wind-driven dust		MILSPEC 810E
speed (max		1,000 knots
altitude (max)		60,000 ft
FCC		class A
	CE mark	