

GEOCUBE SYSTEM SPECIFICATIONS

GENERAL

Satellites signals tracked	GPS L1C/A, GLONASS L1OF, BeiDou B1, Galileo E1B/C
<i>Measure refreshment</i>	<i>30 seconds</i>
Raw data format	RINEX

GNSS TYPICAL PRECISION

Real-time kinematic	Horizontal positioning – dry weather	2 mm (+2 ppm)
	Vertical positioning - dry weather	4 mm (+2 ppm)
	Horizontal positioning – dry weather – 24h average	1 mm (+1 ppm)
	Vertical positioning – dry weather – 24h average	2 mm (+1 ppm)

DATA VISUALIZATION

Data export format	CSV
<i>Download options</i>	<i>Manual, Automatic (FTP/ HTTPS)</i>
Historical data downloadable	Yes
<i>Project setup and visualization</i>	<i>Yes (definition of measured points, calculation frequency, etc.)</i>
Projection	Geocentric, Lambert 93, Geographic, etc.

GEOCUBE HARDWARE SPECIFICATIONS

GENERAL

Satellites signals tracked	GPS L1C/A, GLONASS L1OF, BeiDou B1, Galileo E1B/C
<i>Channels</i>	72
Power consumption active mode	0.270 W
<i>Power consumption sleeping mode</i>	0.080 W
Operating supply voltage	DC 3,5 V – 14,5 V
<i>Size</i>	118mm x 106mm x 36mm
Weight	500 g
<i>Power cable length</i>	3 m
Distance between fixed and mobile Geocube	Up to 2 km
<i>Warranty</i>	1 year

RADIO COMMUNICATIONS

Protocol	Meshed Zigbee
<i>Radio frequency</i>	2.4 GHz/868 MHz
Channels	11 to 26 (according to IEE 802.15.4)
<i>Power</i>	-7 dBm to +18 dBm
Sensitivity	-100 dBm

ABSOLUTE MAXIMUM RATINGS

Ingress protection rating	IP69
<i>Shock resistance</i>	IK7
Operating temperature range	-40°C to +65°C
<i>Storage temperature range</i>	-40°C to +80°C
Maximum number Geocubes in network	>500

OPERATING CONDITIONS

Positional dilution of precision	5 PDOP
<i>Stability zone around each Geocube</i>	5 m
Cut-off angle	15°