Dual GNSS Compass For:

Satellite 2

Peripherals > Dual GNSS Compass

DGC01 - Dual GNSS Compass

DGC01 allows you to accurately estimate the actual heading, under both static and dynamic conditions with no reliance placed on magnetic sensors.

Key Features:

| High Heading Accuracy	High Latitudes Applications

GNSS Redundant	No Compass Calibration

Functions:

- High Heading Accuracy: up to 0.3 degrees in both static and dynamic conditions (depending on baseline length).

- High Latitudes Applications: heading estimation is not dependant on the Earth's magnetic field.

- Easy to integrate with VECTOR through asynchronous RS-232 or 422.

- It can be used as a standalone device.

- IP66 Design: Ready to operate in extreme environments.

- Alternative to magnetometer when compass calibration cannot be carried out.

- It works also as GNSS redundant in VECTOR.
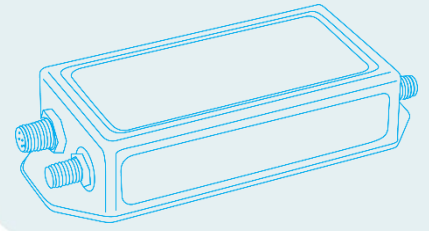
Technical Specs:

ACCURACY	
Heading	0.4°[1]
Horizontal Position Accuracy	< 1.5 m (CEP, 50%, 24 h static, -130 dbm, >6 SVs)
I/O	
Telemetry Port	RS-232, 115200 bit/s
MECHANICAL / ENVIRONMENT	
Size (mm, L x W x H)	102 x 43 x 22 (mm)
Weight	85 g
Temperature range	-40ºC to +85ºC
Mating connector	6 pin Binder
Antenna Connector	50 Ohm SMA Female (x2)
Humidity	Up to 90%, Non-Condensing

[1]50%, measured with 1m baseline and patch antennas with good ground plane and clear sky view.

ELECTRICAL	
Power supply	9V – 36 V
Power consumption	1 W (12 V)
GNSS	
Receiver Type	184 Channel, L1C/A, L2C, L1OF, L2OF, E1B/C, E5b, B1I, B2I, L1S
Multi-constellation capability	GPS, GLONASS, Galileo, BeiDou, QZSS
Time To First Fix (Cold/Hot)	<26s / <2s
GNSS PPS	30 ns RMS, 60 ns 99%
Antenna	Active
Antenna Connector Power Supply	3.2 V
Operational limits of GNSS	Altitude: 80,000m / Velocity: 500 m/s
Navigation Update Rate	5 Hz

UAV Navigation
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