



CSG10
CAN SERIAL
GPS

Cosworth's combined GPS and motion pack unit provides market leading positional accuracy and 9-axis motion data in a cost-effective, single-box solution. With rapid start up times, support for the latest satellites and flexible CAN/serial integration, the compact and lightweight unit is perfectly suited for a variety of applications.

SATELLITE & CONNECTIVITY

Horizontal positional accuracy within 2m is provided by a 10Hz, 72- channel, GPS, QZSS (Japan), GLONASS (Russia) and BeiDou (China) satellite array compatible receiver.

A hot start time of 1s is enabled by storing the last known GPS information up to 15 days after turn off with an automatically recharged internal battery.

9-AXIS MOTION PACK

Lateral, longitudinal and vertical forces up to 16G, pitch, roll and yaw angles up to 2000°/s and vehicle heading are measured with a 3-axis accelerometer, gyro and magnetometer at rates up to 500Hz.

All 3 sensors are user configurable with adjustable range and filters.

DIFFERENTIAL CORRECTION

Greater levels of positional accuracy are achieved with advanced differential correction from SBAS (Satellite Based Augmentation Systems) including WAAS for North America and EGNOS for Europe.

The unit also supports differential correction via an RTCM (Radio Technical Commission for Maritime Services) message which requires a ground based base station and radio link.

INTERFACE & CONNECTION

Extensive device compatibility with simultaneous support for both Serial and CAN data buses.

Optimally position the unit within the vehicle with 1.5m and 5m SMA Antenna loom lengths available

ensuring seamless motion pack performance.

Satellite fix and processor heartbeat are displayed by 2 LEDs.

PHYSICAL & OPERATING

12V or 24V system compatible allowing for the continuation of use in an event of low battery featuring a voltage operating range of 5V – 32V.

Housed in an aluminium enclosure, designed and manufactured to IP65 the unit is protected against the infiltration of dust and has a high level of water protection.

Extremely compact and lightweight with a footprint of 50 x 50 x 26.5 mm and weight of 74g.

CSG10 FEATURE MATRIX

Platform	CSG10 (CAN SERIAL GPS)	
GPS Technical Data	Receiver	72 Channel
	Update Rate	10Hz
	Hot Start	1s
	Cold Start	26s
	Velocity Accuracy	0.5m/s
	Horizontal Position Accuracy	2.0m
Motion Pack Data	Accelerometer Range	±2g, ±4g, ±8g, ±16g
	Gyro Range	±250°/sec, ±500°/sec, ±1000°/sec, ±2000°/sec
	Magnetometer Range	1200µT
Technical Data	Input Voltage	5 - 32V
	Temperature Range	- 10 to 70°C
	CAN Rate	125/250/500/1,000 kbps
Mechanical Data	Material	6082 T6 Alloy
	Dimensions	50 x 50 x 26.5mm
	Weight	74g
	IP Rating	IP65
	Mounting Points	3 x M3 x 0.5 Male - Female AV



Get in touch

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