

**BLACK
BOX
CONTROL**

8002CS Recorder



With BlackBox Control onboard you can get live data using Australia's biggest cellular network and, if you manage to go beyond that coverage range, then the BlackBox Recorder will auto-switch to the inbuilt satellite module to give you data from almost anywhere on the planet.

**LOCATION
ASSIST
TECHNOLOGIES®**

✓ THE BENEFITS

Tracking vehicle routes, manage weight control, reduce fuel and maintenance costs, improve efficiencies.

COVERAGE AND BEYOND...

This is an advanced BlackBox Recorder designed to use the Next G communications network and give you access to Australia's largest cellular coverage area for live asset monitoring at low cellular operating costs. It also has an inbuilt Iridium SBD satellite module to give you live operation from virtually anywhere on the planet.

The 8002CS is intended for commercial vehicle tracking and asset monitoring applications where frequent data reports are required and where the asset will move outside of cellular range. The satellite communications can be configured to suit your requirements and this includes:

- ✓ When you manage to leave the Next G coverage area data can be stored for automatic transmission upon return to coverage.
- ✓ You can select a contact frequency for satellite transmission whilst an asset is out of cellular range. For example a vehicle might normally report its position every minute when in cellular range, you can elect to continue this reporting frequency and send a satellite update every 30 minutes when out of cellular coverage. This allows you to monitor progress of the asset for minimal cost. When the asset returns to Next G coverage, it will backfill all data that includes the minute-by-minute detail.

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LAST UPDATED: 22/11/2011

- ✓ Alternatively, you can optionally switch to satellite communications at the same transmission rate regardless of the communications in use.

The recorder can simply switch between different communication options as required.

The 8002 is our most advanced Recorder yet! It incorporates our experience to date over a wide range of applications that includes rugged mining applications in the hottest parts of Western Australia & the Territory to the windiest chilly parts of Tasmania. You can be comfortable that it was designed and developed in Australia for harsh Australian conditions.

The 8002C contains the latest high sensitivity GPS technology. To optimise the performance we also commissioned a new high performance antenna to help ensure that you can find your asset almost anywhere.

Next G + GPS Combination Antenna – available side or bottom cable entry. Typical applications include:

- ✓ **REAL TIME ASSET LOCATION** – get your assets to the right place at the right time!
- ✓ **MESSAGING** – optionally add a messaging screen for email to and from your field workers. Job allocation was never easier.
- ✓ **TELEMETRY** –for example, interface with engine management modules, data loggers and a wide range of data sources to really watch your asset at work.
- ✓ **SENSOR MONITORING** – our customers are watching a wide variety of sensors to help them know what is happening, where and when. This includes Hi-Rail vehicles going on track, waste vehicles lifting bins, temperatures in multiple compartments in trailers, driver inputs, driver ID, engine hours in mining + construction equipment, passenger numbers on buses, ship + tender activity and many more innovative applications.
- ✓ **FATIGUE MANAGEMENT** – can you ring a driver that just exceeded his driving hours? BlackBox customers are already doing this and making their fatigue management administration a whole lot easier with automatic features.
- ✓ **FUEL MONITORING** – by watching what goes in, where it was purchased and what gets used you will understand your operating costs like never before. BlackBox customers have found huge fuel cost reductions by using better routes, managing the fuel account more efficiently and reducing waiting (idling) times and distance travelled.
- ✓ **COMPLIANCE** – be certain that contracts are being honoured, licenses are being respected, rules are obeyed, supply chain agreements are working...Valuable data to improve your bottom line.

The 8002CS is uniquely configured to form a part of the fully integrated BlackBox Asset Monitoring Solution. At BlackBox we know that location technologies do more than just put your business on the map!

PRODUCT SPECIFICATIONS

ELECTRICAL

Supply Voltage	10-30VDC
Supply Current (max)	1A transmitting mode, < 50mA sleep/standby

OPERATIONAL

Recording Interval	Configurable, range: 1 sec – 3600 seconds
Power Hold Time	Primary and secondary rates are configurable Other reporting controls available. Configurable, range: 1 min – 999 minutes

INPUT / OUTPUT PORTS

Direct Hardware Inputs	4, configurable as analog or digital 100k input impedance
Serial Ports	2x RS-232, 1x J1708/RS-485 (configurable)
Outputs	1x aux power output
Storage Capacity	> 100,000 position reports (>69 days at std configuration)
Storage Medium	Non-volatile FLASH RAM
GPS Sensitivity	-158dBm (tracking), -148dBm (acquisition)
GPS Accuracy	2.5m CEP

RF WCDMA / HSDPA **

Frequency Ranges	Band class I : Tx 1920-1980MHz, Rx 2110 - 2170MHz Band class V: Tx 824-849MHz, Rx 869 - 894MHz
Transmit Power	Class 3 (+24dBm)
Receive Sensitivity	Band class I : -109dBm Band class V: -110dBm

SBD

SBD Frequency range	1616MHz to 1626.5MHz
Duplexing method	TDD (Time Domain Duplex)
Oscillator stability	± 1.5ppm
Antenna VSWR	1.5:1 (50 Ohms)
Multiplexing method	TDMA/FDMA
SBD Message Limit	Mobile Originated 340 Bytes/Message Mobile Terminated 270 Bytes/Message

CONNECTORS

Power/Data	DB25 Female
GPS	SMA (red)
WCDMA	SMA (blue)
SBD	SMA (yellow)

MECHANICAL

Construction	Extruded Aluminium Case
Dimensions	150mm (L) x 57mm (H) x 103mm (W)
Weight	425g nominal

ENVIRONMENTAL

Operating Temperature	-10°C to 60°C
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WARRANTY

12 Months

**BLACK
BOX
CONTROL**

1300 766 764

otca | Certified Transport
Certification
Australia

More than just a dot on the map.

www.blackboxcontrol.com.au