# GLE/SCB-100 Serial to CAN Bus converter

#### **Main Features**

- CAN 2.0B protocol compatibility up to 1Mb/s
- Isolated onboard ISO 11898 transceiver
- Output multiple messages
- RS232 input interface up to 115.2 kb/s
- Rugged construction small form factor
- Extended temperature range
- Wide power supply VDC range

## **Applications**

- Data Acquisition
- Vehicles Testing
- Test Benches
- Laboratory Instrumentation
- Factory Automation
- Automotive Experimentation
- Research & Development
- OEM transducers manufacturer



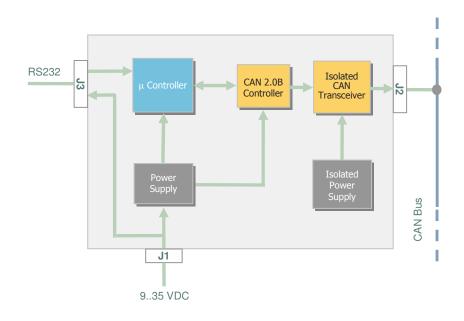
#### Overview

GreenLake Engineering GLE/SCB-100 is a cost-effective solution specifically designed to connect virtually any RS232 capable device to a CAN Bus.

The unit includes a powerful microcontroller to synchronize and parse the incoming RS232 data stream, and a CAN 2.0B controller to send converted messages to a CAN Bus with a bitrate up to 1Mb/s.

Its CAN Bus interface is isolated to avoid ground loops and it is fully compatible with the ISO 11898 standard.

GLE/SCB-100 offers a rugged construction in a small aluminum enclosure as well a wide operating temperature range.

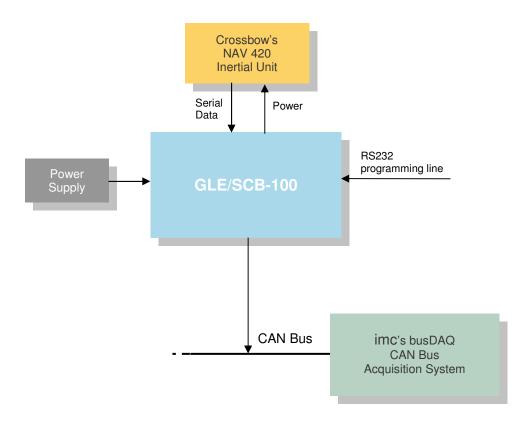


GLE/SCB-100 Block diagram

### **Application Example**

GLE/SCB-100 can be programmed by user in order to support different asynchronous serial protocols sent from different devices, such measurement transducers or systems (GPS receiver, Inertial Systems, Pressure, Load, Displacement sensors ...).

The user programs via RS232 the following Can Bus parameters: bit-rate, data frame format (standard 2.0A or extended 2.0B) and the identifier of each message. Once it is programmed, the setup is automatically loaded at power up and this unit runs as a stand-alone interface box without the need of an external PC.



The configuration is simply made through RS232, by an ANSI terminal emulation software (e.g. standard Windows HyperTerminal).

GreenLake Engineering GLE/SCB-100
Ver 1.0 25/01/07

(1) Set RS232
(2) Set CAN Bus
(3) Set CAN msgs
(4) Load parameters
(5) Save parameters
(6) Run

Enter choice:

**Technical Specifications** 

Input interface	RS232 up to 115.2 kbit/s
input interface	The standard Firmware handles single binary packet (*)
Input connector (J3)	DSUB 15 pin Socket (it also provides the power supply to the RS232 device directly derived from the input power connector).
Output interface	Isolated CAN 2.0B 1Mbit/s ISO 11898
Output connector (J2)	DSUB 9 pin Plug
Output messages	up to ten CAN messages
CAN Bus	SJW=1, Sampling point 75%, single sampling
Status indication (LEDs)	Power on, RS232 sync OK and CAN TX activity
Operating Temperature Range	-40+85°C
Power supply (J1)	935 VDC, 0.8 W
Power supply connector	TRIAD 01, 3 pin plug
Mechanical Construction	EMI shielded aluminum enclosure
Dimensions	82 x 32 x 70.4 mm (W x H x D) approx
Weight	Approx 160 grams (excluding mating connectors)

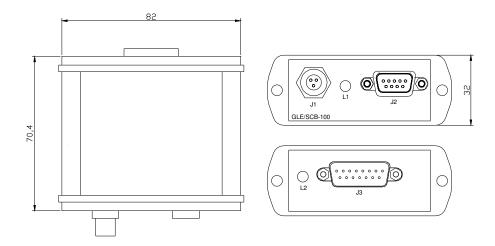
<sup>(\*)</sup> Please contact the factory for different RS232 protocols.

# **Options & Accessories**

Mating connectors		Included
Power supply cable	2 meters with banana plugs	Included
Programming cable	2 meters	Included
External power supply wall mount	Input 110-230VAC – output 12VDC	Option
Custom cabling harness for Crossbow's 400, 420 or 440 series inertial units	Length to be specified	Option
Mounting Flanges		Option
RS422 input instead of RS232 input		Option

Due to continuous developments specifications subject to change without prior notice. GLE/SCB-100 HW and SW can be factory customized to meet various OEM necessities.

# **Mechanical drawing**



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