

## NMEA 2000 to NMEA 0183 Gateway NGW-1

Hook up to NMEA 2000 now, while keeping your current NMEA 0183 devices...

The Actisense NGW-1 provides an easy way to link between your boat's data networks. The NGW-1 makes it possible to convert NMEA 0183 data into NMEA 2000 data and vice-versa.

Using the advanced configuration software provided, it is simple to set up which data items you want and where.

You can also use multiple NGW units to multiplex many NMEA 0183 devices onto the NMEA 2000 network, using the network as a means of combining and transferring all data items from one place to another. The high reliability of NMEA 2000 data transfer ensures effective communication even in the presence of interference. You can then pick up the data from the bus wherever it's needed, reducing wiring complexity.

The NGW features the latest innovations from Actisense - its ISO-Drive output provides a fully isolated NMEA 0183 talker

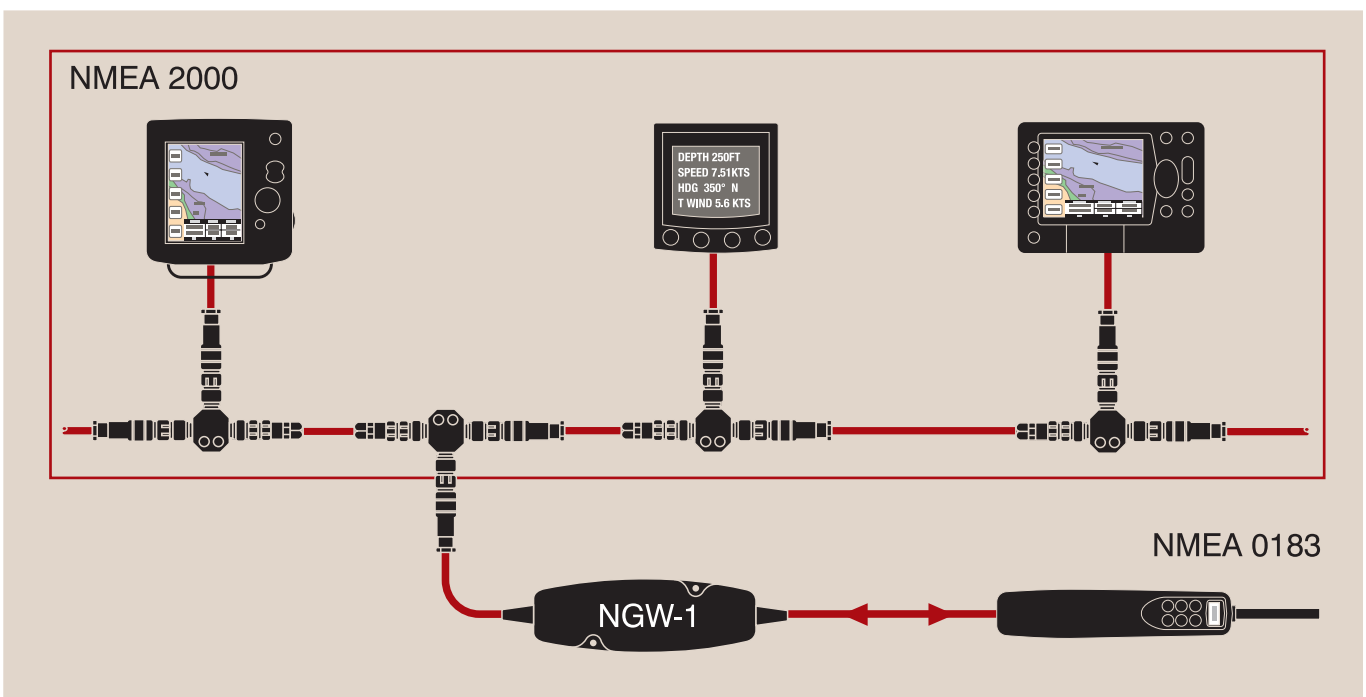
port that can "float" safely up to 1.5kVDC from ground. The NMEA 0183 listener port is also fully OPTO isolated using a 2.5kV OPTO circuit. These features mean the NGW-1 is free from ground loop installation issues.

**Uses**

- Upgrade your current NMEA 0183 equipment and connect it to your NMEA 2000 network
- Allow your NMEA 0183 instruments to receive vital data from the NMEA 2000 bus
- Provide a gateway between the two bus systems, allowing data sharing
- Use the NMEA 2000 network to multiplex many NMEA 0183 signals onto a single bus

**Features**

- Full electrical isolation
- Can connect to either PC COM Port or NMEA 0183 marine serial interfaces
- Up to 115.2 kbps data transfer rate



# NMEA 2000 to NMEA 0183 Gateway NGW-1

## Specifications

### NMEA 2000 Connection

- Full specification NMEA 2000 port using an isolated CAN bus connection at 250kbps

### ISO-Drive Flexible Output

- Electrically isolated from both NMEA 2000 port and OPTO input
- Exceeds all NMEA 0183 output drive specifications
- Capable of driving more than 10 NMEA 0183 compliant listeners
- Can send data to PC (RS232) or Marine (NMEA 0183) listeners
- Short circuit protected
- Static discharge protected
- Baud rate selectable from 4800 to 115200

### OPTO-Isolated Flexible Input

- Full galvanic opto-isolation offering up to 2.5kV DC protection from both NMEA 2000 port and ISO-Drive output
- Compatible with PC (RS232) or Marine (NMEA 0183) data talkers
- Current limited to NMEA 0183 specification
- Overdrive protection to 40 volts DC
- Baud rate selectable from 4800 to 115200 Baud

### PC Software

- Operating systems supported: Windows 98, ME, 2000 and XP
- Supplied on CD

### Built-in Firmware

- The NGW-1 software runs on one of the latest low power 32-bit microprocessors
- Flash upgradeable and field reprogrammable
- Fully configurable to suit any installation requirements

### Supported Conversions

- For the latest comprehensive list of conversions please refer to the NGW-1 area on the Actisense website

### Power supply

- Supply voltage taken from the NMEA 2000 bus
- Supply voltage range: 10 to 35 volts DC
- Current Consumption:  
30 mA off load @ 12v DC  
16 mA off load @ 24v DC

### Environmental

- Recommended operating temperature: -20°C to +70°C
- Splash proof plastic casing provided with sealing grommets to IP54
- Recommended humidity: 0 - 80% RH

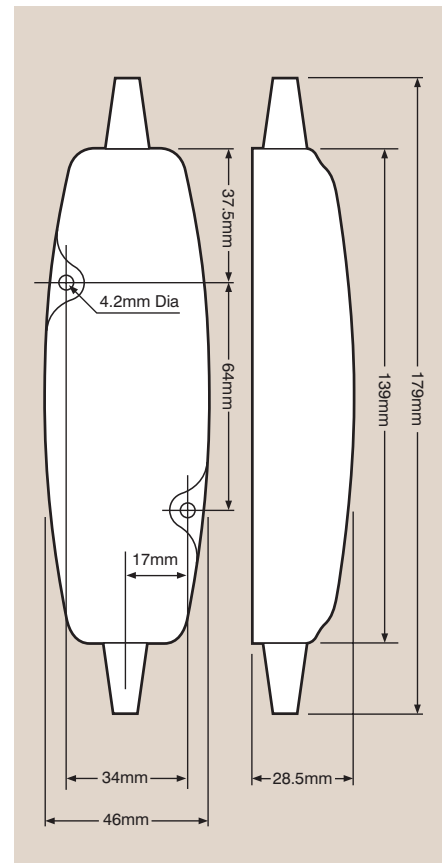
### General

- Weight: 200 grams including cables
- Dimensions: see diagram
- Cable length:  
NMEA 2000 - 1 metre  
NMEA 0183 - 2 metres
- Guarantee: 3 years

### Part Number

- NGW-1

## Dimensions



Active Research Limited  
Unit 5, Wessex Trade Centre  
Ringwood Road, Poole  
Dorset UK BH12 3PF

t: +44 (0)1202 746682  
f: +44 (0)1202 746683  
e: sales@actisense.com  
[www.actisense.com](http://www.actisense.com)

**Actisense**™

Actisense from Active Research