

## NMEA 2000 Interface NGT-1-USB / NGT-1

### Connect your PC to your NMEA 2000 network now...

The **Actisense** NMEA 2000 PC Interface (**NGT**) provides an easy way to link your computer running Actisense 'Certified Software' to your NMEA 2000 network.

The **NGT** comes factory configured to transfer the core NMEA data, and using the advanced configuration software provided, it is simple to set up which data items you want to transfer.

The **Actisense** 'Certified Software' program offers software vendors a quick method of adding an **NGT** to their products - allowing them to share and interact safely on the NMEA 2000 network via the computers's serial or USB port. The **NGT** acts much like a firewall - preventing illegal operations and maintaining the integrity of the NMEA 2000 network.

This allows use of **Actisense** 'Certified Software' to seamlessly connect their NMEA 2000 network to a computer and share in the wealth and security of information that the new NMEA network provides.

The **NGT** comes in two versions featuring the latest innovations from **Actisense**.

The **NGT-1-USB** allows quick connection of the NMEA 2000 network to a computer via the USB port. 2.5 kV isolation between the NMEA 2000 and USB ports mean that the **NGT-1-USB** can be used with complete peace of mind.

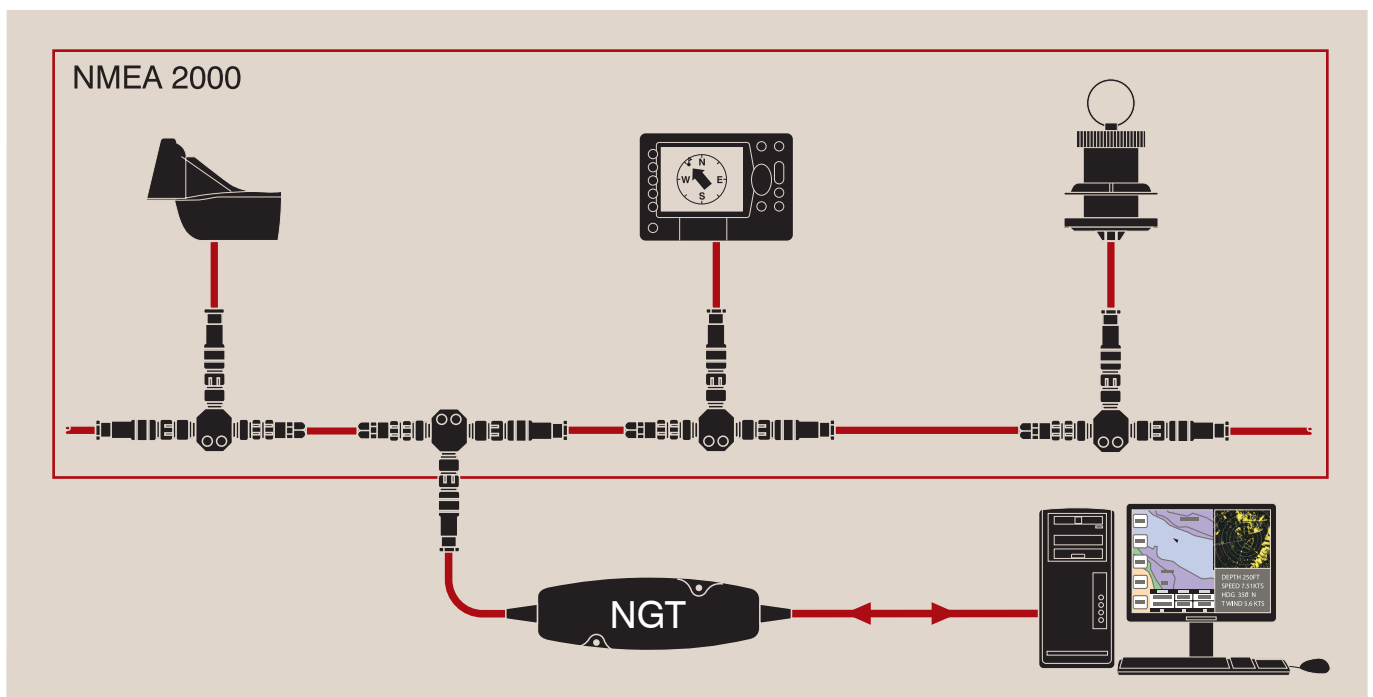
Also available is the **NGT-1** which utilises Actisense's ISO-Drive technology to provides a fully isolated serial output port that can "float" safely up to 1.5 kV from ground. The serial input port is also fully OPTO isolated using a 2.5 kV OPTO circuit. These features make the **NGT-1** free from ground loop installation issues.

#### Uses

- Connect you computer software to your NMEA 2000 network
- Direct transfer of the NMEA 2000 messages mean there is no translation to change the NMEA 2000 data
- Allows adapted versions of chart plotter software to use NMEA 2000 data

#### Features

- Full electrical isolation in both directions
- Can connect to either a computer's COM Port, RS232/RS422 or USB interfaces
- Up to 230400 bps data transfer rate can allow 100% of the NMEA 2000 data to be transferred.



# NMEA 2000 Interface NGT-1-USB / NGT-1

## Specifications (Common)

### NMEA 2000 Connection

- Full specification NMEA 2000 port using a 2.5 kV isolated CAN bus connection at 250 kbps

### Built-in Firmware

- The **NGT** firmware runs on one of the latest low power 32-bit microprocessors
- Flash upgradable and field reprogrammable for the future
- Factory settings are fully configurable to suit any installation requirements

### PC Software (USB drivers & demo program)

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

### Actisense 'Certified Software'

- For the latest comprehensive list of all **Actisense** 'Certified Software' please refer to the '**NGT-1**' area on the [Actisense website](http://www.actisense.com)

### Power supply

- Supply power taken from the NMEA 2000 bus, and USB port (**NGT-1-USB**)
- NMEA 2000 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

- Dimensions: see diagram
- Cable lengths:  
NMEA 2000 micro-fit male - 1.5 metre  
Serial - 1.5 metres (**NGT-1**)  
USB - 1.8 metres (**NGT-1-USB**)
- Guarantee: 3 years RTB

## Specifications (Standard version NGT-1-USB)

### USB specification

- Full compliance with both v1.1 and v2.0 USB specifications
- Upstream and downstream buffers for smoother data transfer

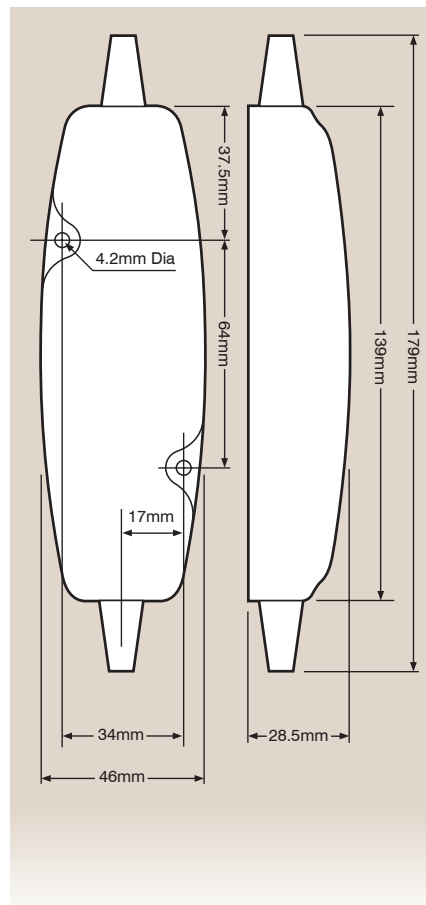
### System Requirements

- Operating systems supported:  
Windows 98, ME, 2000, XP, Vista  
MAC OS X  
(check the [Actisense website](http://www.actisense.com) for other versions and operating systems)
- USB Host Controller installed on the PC system

### Part Number

- **NGT-1-USB**

## Dimensions



## Specifications (Specialist version NGT-1)

### ISO-Drive Flexible Output

- Electrically isolated from both NMEA 2000 port and OPTO input
- Fully RS232, RS422 and RS485 (listeners only) compatible
- Can send data to PC (RS232) or Marine RS422 devices
- Short circuit protected
- Static discharge protected
- Baud rate selectable from 4800 to 230400 (defaults to 115200 Baud)

### OPTO-Isolated Flexible Input

- Full galvanic opto-isolation offering up to 2.5 kV protection from both NMEA 2000 port and ISO-Drive output
- Compatible with PC (RS232) or Marine RS422 devices
- Overdrive protection to 40 volts DC
- Baud rate selectable from 4800 to 230400 (defaults to 115200 Baud)

### Part Number

- **NGT-1**

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