

Connect multiple NMEA devices to your PC, Plotter, Radar, Autopilot and more...

The **Actisense™** NMEA (National Marine Electronics Association) Combiner / Multiplexer from Active Research allows connection of four opto-isolated inputs into one output.

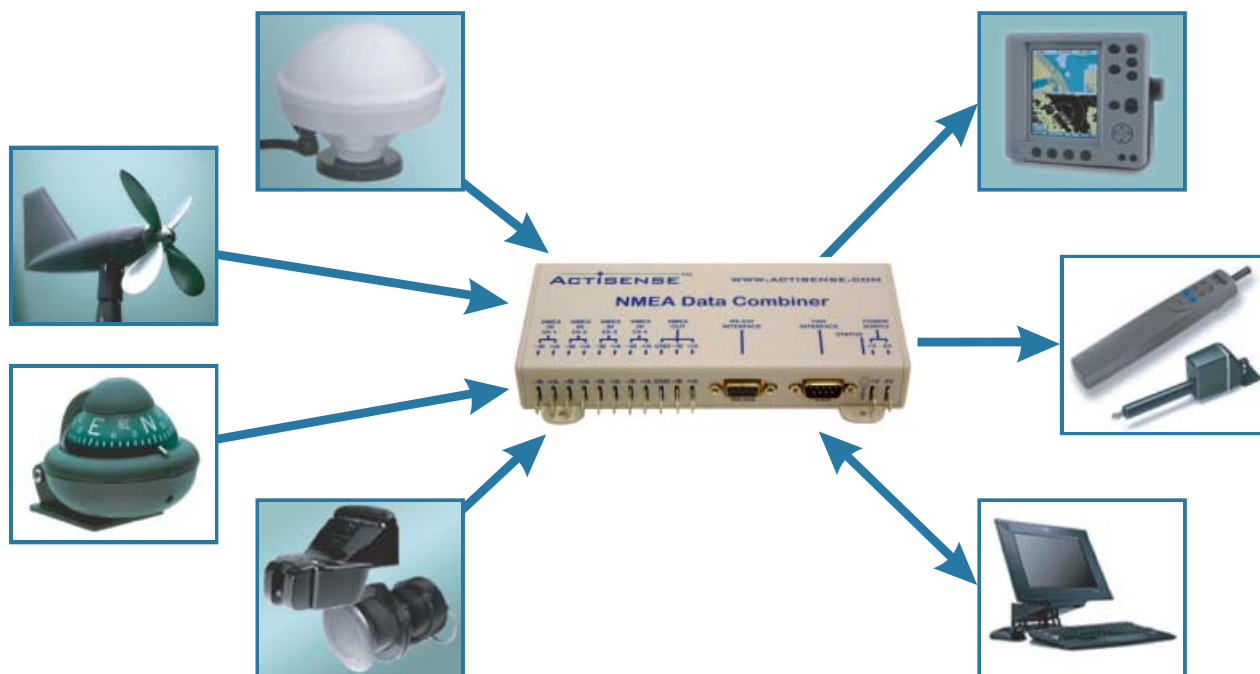
Electrical spike protection is provided on all four input channels using opto-isolators to any **protect connected equipment** from most system faults; a particularly valuable benefit as equipment requiring the most data, such as a PC or chart plotter, is often the most expensive.

The **PC Interface RS-232 port** can reproduce the NMEA data on a laptop or PC. The combiner also enables the PC to talk back to connected marine hardware, allowing it to control onboard equipment from **"virtual cockpit" software**.

The **buffered NMEA 0183** output boosts the signal current, allowing parallel connection to many bridge instruments at the same time, removing the need for a separate NMEA buffer.

Free configuration software is provided that allows users to set up filters on the NMEA input channels to prevent unwanted data reaching the combined NMEA output channel and crowding the network. This **reduces the risk** associated with conventional NMEA combiners of delaying or losing important information when the NMEA network is running at over 50% capacity.

Configurable port priority can further reduce the possibility of important NMEA data being lost.



Easy reprogrammability is assured through the combiner's built-in "flash memory" that can be updated with the latest changes in interfacing standards using free update software available from the **Actisense™** website.

The **NMEA 2000 interface** provides extra future-proofing by providing compatibility with the upcoming marine standard.

The **low power consumption** is also an advantage in small boat installations.



NMEA Input system

- Each channel fully opto-isolated
- Exceeds all NMEA 0183 input voltage specifications
- Capable of receiving 1.8v differential signal levels
- Current limited (protects from cable short circuits)
- Over voltage protected
- Will also receive RS232 signal levels
- NMEA input to output protection: 2000v DC
- Baud rate selectable (2400-9600)

NMEA Output system

- Exceeds all NMEA 0183 output voltage specifications
- Capable of driving up to 25 NMEA 0183 compliant instruments. Typical maximum drive is 10 instruments
- Short circuit protected
- Static discharge protected
- Baud rate selectable (4800-38400)

RS232 Interface

- Standard PC 9-pin D-type bi-directional connection
- Short circuit protected
- Static discharge protected
- Baud rate selectable (19200-115200)

NMEA 2000 (CAN bus) Interface

- Standard PC 9-pin D-type bi-directional connection
- Meets or exceeds signal and isolation requirements of NMEA 2000 specification
- Full opto-isolation for signal and power signals
- Powered directly from the CAN bus interface

Data Latency

- Input to output data delay maximum is 0.1 seconds

Power supply

- Supply Voltage range: 7 to 29 volts DC
- Power Consumption: 100 mA @ 12v DC / 1.2 W

Environmental

- Recommended operating temperature: -20°C to +70°C
- Coated printed circuit board inhibits moisture ingress to sensitive components

General

- Weight: 500 grams
- Dimensions: see diagram below
- Guarantee: 2 years

Built-in Firmware / Software

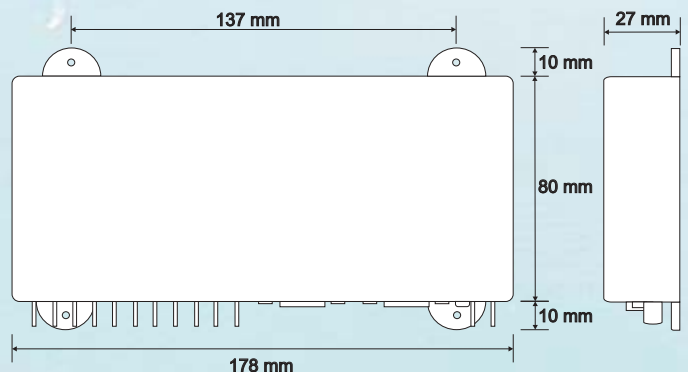
- Free software updates available on [Actisense™](http://www.actisense.com) website
- Simple one button reprogramming utility
- Totally re-configurable to meet users requirements
- Future-proof design
- Custom programming service available

Configuration Software

- Freely available on the [Actisense™](http://www.actisense.com) website
- PC Windows OS software (95/98/ME and NT/2000/XP)
- Controls the set-up of filters on the input channels to prevent unwanted NMEA data reaching the combined NMEA output channel and crowding the network
- Defines the input channel priority order
- Provides diagnostic aids to help in setting up, testing and monitoring of the Actisense NMEA combiner in your system. Displays useful information such as the amount of data entering each channel, and percentage loading of the output channel

Part number

- NDC-1-A



5 Wessex Trade Centre
Ringwood Road, Pool e
Dorset, UK. BH12 3PF.
Tel : +44 (0)1202 746682
Fax: +44 (0)1202 746683
Email : sales@actisense.com
Web: www.actisense.com