

## NGT-1



### NMEA 2000® to PC Interface

#### Feature

#### Advantage

#### Benefit

- PC Interface to an NMEA 2000 network

- ✓ Safely transfer NMEA 2000 data to/from a computer application

- ✓ Compatible with all major chart-plotter applications on Windows, Mac and Linux. Apps can seamlessly receive and send NMEA 2000 data

- NMEA 2000 diagnostic tool

- ✓ Offers visibility of the data each NMEA 2000 device is sharing, using the NMEA Reader software

- ✓ Diagnosing NMEA 2000 networks begins with understanding what data is available and from where

- Unified Actisense update interface

- ✓ Applications using the Gateway can configure and update firmware in other Actisense NMEA 2000 devices

- ✓ Having a single PC Interface for all Actisense devices helps simplify all configuration and update operations

- NMEA 2000 Firewall

- ✓ By enforcing fundamental NMEA 2000 message rules, network integrity is better maintained

- ✓ Applications are freed from managing base level NMEA 2000 rules, allowing developers to focus more on data

- Software Developers Kit (SDK)

- ✓ Supports software developers, reducing the time required to develop an application

- ✓ Greatly reduces the cost barrier to developing an NMEA 2000 application

- High data transfer rates

- ✓ A 230400 baud rate offers full transfer of data regardless of network load

- ✓ Applications can receive and process all PGN messages, even on the busiest NMEA 2000 network

- USB or ISO interface options

- ✓ USB and ISO-Drive™ variants offer compatibility with different installations

- ✓ USB offers simple compatibility with PC systems. ISO-Drive does not require USB drivers and is compatible with embedded computers

- Full galvanic isolation

- ✓ Computer remains fully isolated from the NMEA 2000 network using galvanic Opto-isolation

- ✓ Renowned Actisense isolation technology keeps connected device protected from ground loops, providing peace of mind and reliability

- Integrated drop cable

- ✓ Connects directly to an NMEA 2000 T-Piece without an additional drop cable in most installations

- ✓ Cost effective installation solution

- Firmware upgradable

- ✓ Firmware update tool allows the Gateway to be kept up to date with the NMEA 2000 Standard

- ✓ Provides a future proof solution for peace of mind purchase and operation

- Free Diagnostics software

- ✓ NMEA Reader and EBL Reader software applications are freely downloadable

- ✓ NMEA Reader allows real-time viewing and diagnosis, plus recording/logging of all network data. EBL Reader allows viewing of off-line logged data recordings for deeper diagnosis investigation

- Low Power usage

- ✓ Very efficient design reduces battery consumption

- ✓ Minimal drain on the network's battery/PSU

- Simple plug-and-play power options

- ✓ USB variant is computer powered and ISO variant is NMEA 2000 powered, making installation easy

- ✓ Quicker installation with a single cable to both communicate and power the Gateway device

# NGT-1

## NMEA 2000® to PC Interface

### Interface your PC to the NMEA 2000® bus

The NGT-1 is an intelligent NMEA 2000 gateway able to precisely Transfer messages to and from the NMEA 2000 bus. It is compatible with a wide range of Chartplotters, display and configuration applications available for PCs.

The diagnostic NMEA Reader software allows viewing of NMEA 2000 messages with configuration options, enabling some set-up of Actisense products on the NMEA 2000 bus.



## Technical Specifications

Power Supply (ISO Variant)	
Supply Voltage (NMEA 2000 Port)	9.5 to 35V DC
Supply Current (NMEA 2000 Port)	35mA @ 12V DC, Max 50mA
Load Equivalent Number (LEN)	1
Power Supply (USB Variant)	
Supply Voltage (NMEA 2000 Port)	9 to 29V DC
Supply Current (USB Host Port)	85mA @ 5V DC
Supply Current (NMEA 2000 Port)	15mA @ 12V DC, Max 50mA
Load Equivalent Number (LEN)	1
NMEA 2000 Port (All Variants)	
Compatibility	Fully NMEA 2000 certified
Speed / Baud Rate	250kbps
Connectivity	M12 Male (A coded) connector moulded on cable
Cable Length NMEA 2000	1.5m
Cable Length STNG Adapter	0.4m (1.9m with NMEA 2000 cable connected)
ISO Port (NGT-1-ISO)	
Compatibility	Fully RS232 & RS422 compatible.
Speed / Baud Rate	4800 to 115200 Baud
Output Voltage Drive	>= 2.1V (differential) into 100Ω
Output Current Drive	20mA max.
Output Protection	Short circuit and ESD
Input Voltage Tolerance	-15V to +15V continuous -35V to +35V short term (< 1 second)
Input Protection	Current limited and overdrive protection to 40VDC
Connectivity	5mm stripped and tinned wire
Cable Length	1.5m

USB Port (NGT-1-USB)	
Compatibility	USB 1.1, 2.0 and 3.0
Speed / Baud Rate	4800 to 230400 Baud
Connectivity	Male type A plug moulded onto cable
Cable Length	1.5m
Drivers (Latest OS)	MAC OS X, Windows XP, 7, 8 & 10 supplied via the Product Downloads web page
Drivers (Legacy OS)	Contact Actisense for full details of the legacy OS versions supported: support@actisense.com
Isolation	
NMEA 2000 Port to ISO Port	Uses IsoDrive™, Hi-Pot tested to 1000V
NMEA 2000 Port to USB Port	Galvanic Isolation, Hi-Pot tested to 1000V
Mechanical	
Housing Material Lid	Polycarbonate
Housing Material Base	Flame retardant ABS
Weight NGT-1-ISO	220g
Weight NGT-1-USB	210g
Weight STNG Adapter	40g
Approvals and Certifications	
Fully NMEA 2000 Certified	
Meets all IEC 61162-3 requirements	
EMC	IEC 60945 (sections 9, 10 & 11.2)
Environmental Protection	IP42
Operating Temperature	-20°C to +55°C
Storage Temperature	-30°C to +70°C
Recommended Humidity	0 - 93% RH
Guarantee	3 years

Part Numbers: NGT-1-USB  
NGT-1-ISO

All specifications are taken with reference to an ambient temperature of 25°C unless otherwise specified. All specifications correct at time of print.