## Actisense

# NGT-1

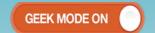




### NMEA 2000® to PC Interface

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
<ul> <li>Free Diagnostics software</li> </ul>	✓ 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
<ul> <li>Simple plug-and-play power options</li> </ul>	✓ 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 retardent 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.