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**Actisense**

# Quick Network Block

## QNB-1

### Quick Start Guide



## Important Notices

The device to which this manual relates complies with the Electromagnetic Compatibility requirements according to EN60945. The unit should always be used in conjunction with appropriately approved, shielded cable and connectors as per NMEA 0400 to ensure compliance. A declaration of conformity is available for download at [www.actisense.com](http://www.actisense.com). If the device to which this manual relates is to be installed within five metres of a compass, please refer to the 'Compass Safe Distance' section in the 'Technical Specifications' table available on the Actisense website.

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## Product Registration

Please register your product via the online form at <http://actisense.com/support/prodreg.html>.

Your product package includes a unit serial number. The serial number is six digits long and can be found below the barcode on the label. Your registration will assist Actisense Support to link your product to your details, simplifying any future assistance you may require.

## Product Disposal

Please dispose of this product in accordance with the WEEE Directive. The product should be taken to a registered establishment for the disposal of electronic equipment.

## Technical Accuracy

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## Product Guarantee

This product comes with a three year 'return to base' guarantee. If you suspect that the unit is faulty please refer to the Troubleshooting Section of the User Manual before contacting support.

It is a requirement of the guarantee that all installations of electronic equipment follow the NMEA 0400 specification. Any connection to a battery or power supply must meet the mandatory essential safety requirements that may be imposed by local regulatory agencies.

Actisense products are intended for use in a marine environment, primarily for below deck use. If a product is to be used in a more severe environment, such use may be considered misuse under the Active Research Ltd guarantee.

## Introduction & Features

The Actisense QNB-1 provides instrument drops for up to six NMEA 2000 devices offering a flexible alternative to multiple T-pieces and reducing the cost of an NMEA 2000 installation.

The QNB-1 is available in two versions:

The QNB-1-PMW version is fitted with six standard NMEA 2000 M12 (Micro-fit) female connectors which allow 'plug and play' connections for quick and easy installation. A Raymarine STNG backbone can be wired to one side of the QNB-1 to combine standard NMEA 2000 with STNG without the need for adapter cables.

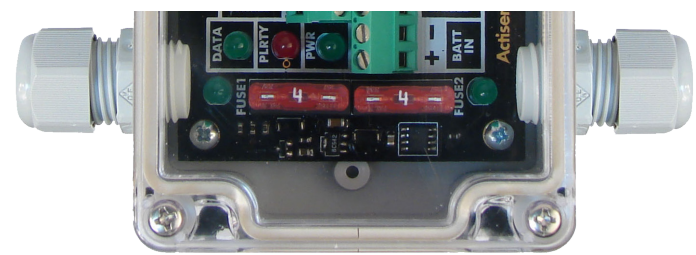
The QNB-1 version is fitted with glands to allow for installation of custom lengths of cable. This is a great option for 'mix & matching' standard NMEA 2000 devices with Raymarine STNG devices.

Both versions are fitted with LEDs that provide information during set up and use to indicate the presence of data, power status, polarity and to show

## Powering the QNB-1

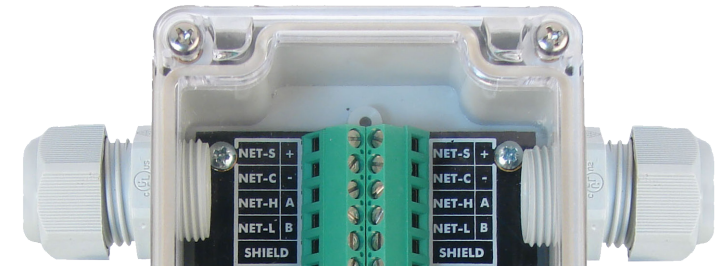
For standard operation, connect a power supply or battery with a 10 to 16 volt output. For extended voltage range operation (16 to 35 volts), the installer must first check that all NMEA 2000 devices can support that higher voltage, as the QNB-1 does not regulate the voltage supplied to it.

Connect the battery positive wire to the '+ BATT IN' terminal and the battery negative wire to the '- BATT IN' terminal. Use the 4 amp fuses provided for 'micro' (lite) backbone cable or the 8 amp fuses for 'mini' (heavy) backbone



## Connecting the backbone cable

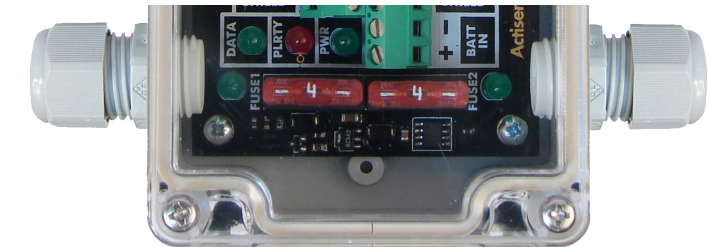
Using NMEA 2000 approved cabling, install the backbone cable through the large glands to the terminals furthest from the power supply. A pin out table is available below. This pin out is the same for standard NMEA 2000 and



Wire Colour	Connects to
Red	NET-S
Black	NET-C
White	NET-H
Blue	NET-L
Bare/green	Shield

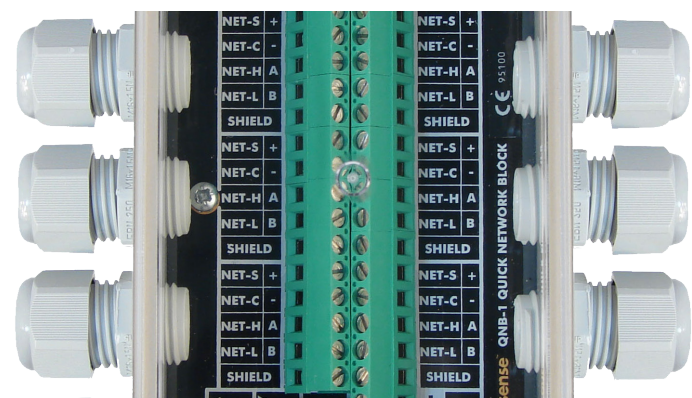
## LED Behaviour

'PLRTY' - illuminates if the BATT IN + and - are the wrong way around  
'PWR' - indicates presence of power on BATT IN  
'FUSE1' & 'FUSE2' - illuminates when corresponding fuse is good and intact



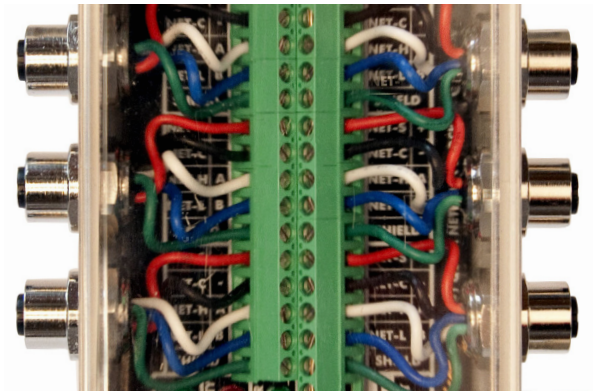
## Connecting NMEA 2000 Devices to the the QNB-1

NMEA 2000 instruments should be connected to any of the six remaining spaces available between the power supply and the backbone terminals. See table in 'Connecting the backbone cable' section for pin out. This pin out is also the same for standard NMEA 2000 and Raymarine's SeaTalkNG system.



## Connecting NMEA 2000 Devices to the the QNB-1-PMW

Connection of NMEA 2000 devices to the 'PMW' variant of the QNB-1 is quick



## Mounting the QNB-1

The QNB-1 can be mounted to any flat bulkhead using the screw holes located in each of the four corners of the case. The case has been designed to be mounted with the glands/connectors on the sides, and not the top and bottom.