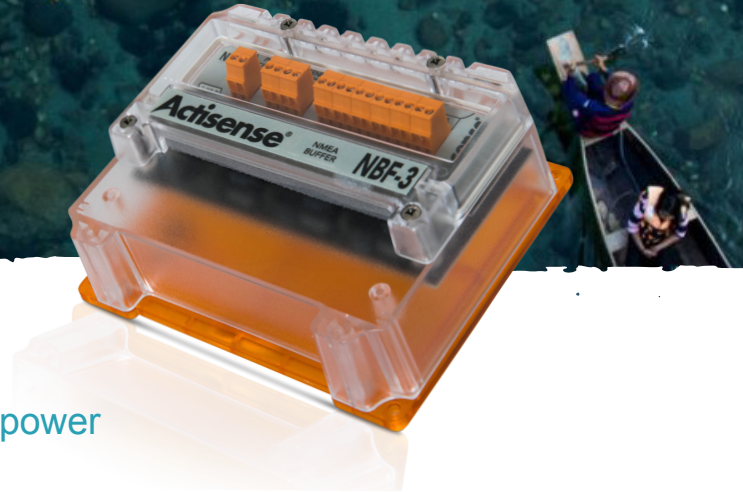


## NBF-3 NMEA BUFFER



Safely drive up to six NMEA Listeners, with power distribution for the connected Talker.

The NBF-3 NMEA Buffer isolates and buffers NMEA 0183 data, with the power to drive multiple devices.

Able to distribute up to six identical, amplified streams of data from one source. The NMEA signals are buffered to ensure that each Listener receives the data at the required voltage levels, providing consistent data quality.

Isolation on the input and outputs ensures the protection of the source Talker device

and Listening devices. ISO-Drive™ technology on the outputs and OPTO-isolation on the input enables you to connect the NBF-3 with complete peace of mind.

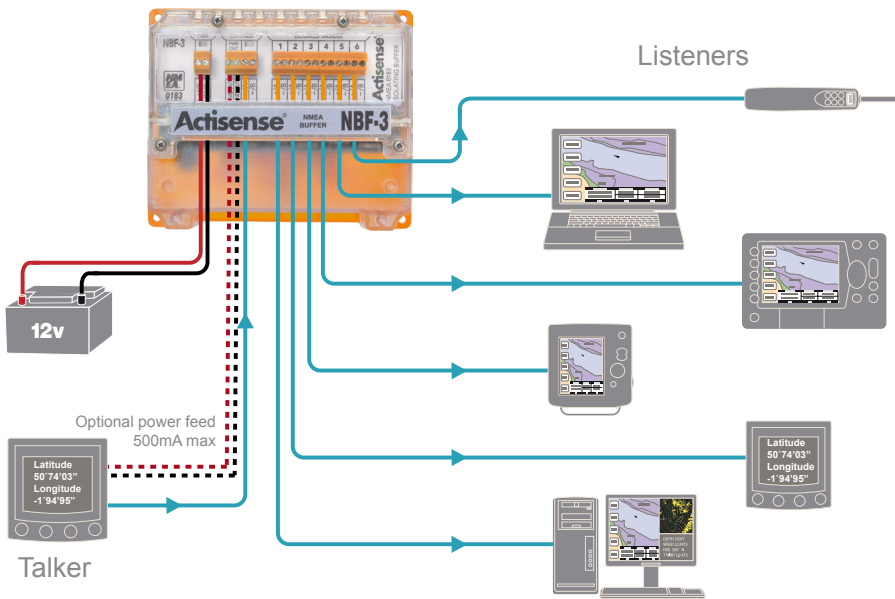
The NBF-3 has the addition of power distribution for the NMEA Talker. By having power and data from the same source, cabling requirements are reduced and installation is made simpler.

### Benefits

- AIS compatible
- Protects connected devices
- Simple installation
- Can be used to isolate between two PC systems

### Features:

- One OPTO-isolated input
- Six ISO-Drive™ outputs
- Compatible with RS422, RS232 and RS485 connections
- Pluggable screw terminals
- Power and input indicator LEDs
- Power feed for single cable installations to the NMEA Talker
- DIN Rail mountable
- Up to 115200 baud
- 1500V isolation on inputs & outputs



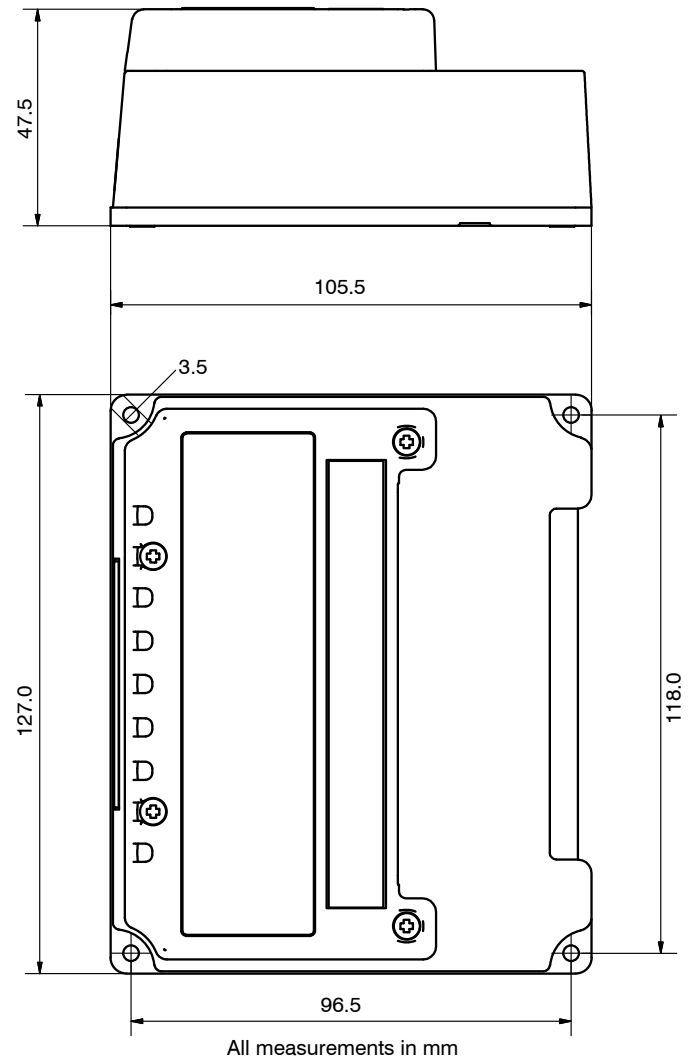
# NBF-3 Specifications

GEEK MODE ON



| Power Supply                        |  |
|-------------------------------------|--|
| Input Supply Voltage                | 10 to 35V DC   |
| Input Supply Current (NBF-3 only)   | 100mA max @ 12V DC (all outputs @ full drive into 100Ω loads)  |
| Input Supply Connector              | Pluggable 2 way screw terminal, 3.5mm pitch  |
| Input Protection (NBF-3 only)       | Continuous reverse polarity and ESD protection only  |
| Power Indicator                     | LED, blue (lit constantly indicates correct operation when input supply connected)                                     |
| Listener Power Output Voltage       | 10 to 35V DC derived directly from the input supply voltage  |
| Listener Power Output Current       | 500mA max @ ≤ 30°C (see note)* (PTC self-resettable fuse)  |
| Listener Power Output Connector     | Pluggable 2 way screw terminal, 3.5mm pitch  |
| NMEA 0183 Port - Listener & Talkers |  |
| Number of Listener / Input Ports    | One isolated NMEA 0183 Listener  |
| Number of Talker / Output Ports     | Six isolated NMEA 0183 Talkers   |
| Compatibility                       | Fully NMEA 0183, RS422 & RS232 compatible. RS485 Listener compatible   |
| Galvanic Isolation                  | 2500V input to ground 1500V output to ground using ISO-Drive   |
| Speed / baud rate                   | 4800 to 115200 bps   |
| Talker Output Voltage drive         | ≥ 2.1V (differential) into 100Ω  |
| Talker Output Current drive         | 20mA max.  |
| Talker Output Protection            | Short circuit and ESD  |
| Listener Input Voltage Tolerance    | -15V to +15V continuous, -35V to +35V short term (<1 second)   |
| Listener Input Protection           | Current limited, overdrive protection to 40V DC and ESD protection   |
| Listener Data Indicator             | LED, green (flashes at data rate)  |
| Connectors                          | Pluggable 2-way screw terminals, 3.5mm pitch   |
| Approvals and Certifications        |  |
| EMC                                 | EN 60945 (sections 9 & 10)   |
| Environmental Protection            | IP66   |
| Operating Temperature               | -20°C to +70°C   |
| Storage Temperature                 | -40°C to +85°C   |
| Mechanical                          |  |
| Housing Material                    | Polycarbonate  |
| Protective Lid Material             | Polycarbonate  |
| Sealing Materials                   | Expanded silicone foam gasket, closed cell polyurethane splash guard and ePTFE water-proof vent                        |
| Dimensions                          | 127mm (L) x 106mm (W) x 48mm (H)   |
| Weight                              | 210g   |
| Mounting                            | 4 x 3.5mm lugs to allow panel mount with self tapping screws (included), optional DIN rail mount available on request. |

## Product Dimensions



## What is ISO-Drive™?

ISO-Drive™ technology is unique to our products and ensures each 'Talker' output is protected. ISO-Drive™ provides an isolated output, making installation simple and free from ground loops. This substantially reduces the risk of damage and hazards in connected equipment.

The ISO-Drive™ output is compatible with all connection types (RS422, RS485 & RS232), making for easy installation of an NMEA 0183 data bus system.

Outputs are separately isolated from each other and the input (Listener) circuit and can 'float' safely up to 1500 volts D.C from system ground.