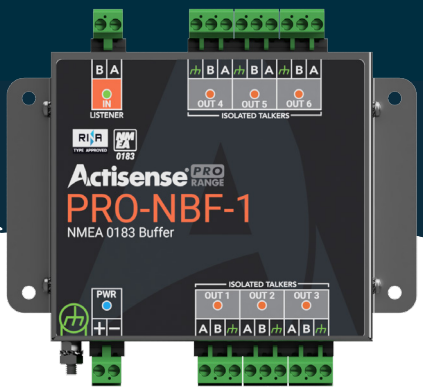
Actisense®
Connect without limits



PRO-NBF-1

PROFESSIONAL TYPE APPROVED NMEA BUFFER

Type Approved, PRO Range Buffer. Safely connect one Talker to six Listeners with full isolation.

The PRO-NBF-1 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 Listener devices.

ISO-Drive™ technology on the outputs and OPTO-isolation on the input enables you to connect the PRO-NBF-1 with complete peace of mind.

The stainless steel housing makes the device rugged, sturdy and gives an increased durability. The metal case also acts as an RF Shield making the device an ideal addition to commercial installations.

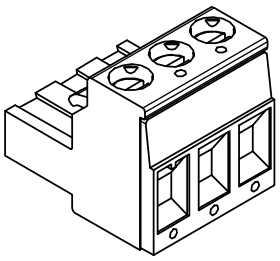
To make installation quick and simple the PRO-NBF-1 features 2-part pluggable connectors that allow use of screw terminals. The PRO-NBF-1 is designed to be mounted on a bulkhead or alternatively it can be mounted on a DIN Rail using the optional brackets.

The optional strain relief brackets can be provided to ensure reliable professional cable management.

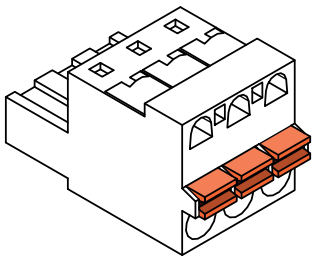
Helpful LEDs indicate power, input and output operation.

Features:

- Type Approved
- One OPTO-isolated input
- Six ISO-Drive™ outputs
- Compatible with RS422, RS232 and RS485 connections
- Pluggable screw terminals
- Power indication LED
- Input and Output diagnostic LEDs
- Up to 115200 bps
- 1000V isolation on IN and OUT
- Optional strain relief brackets



Screw Terminals



A-CONPACK-PNBF1

Screwless Terminals available as an accessory

Actisense®

t: +44 (0)1202 746682
e: sales@actisense.com
www.actisense.com

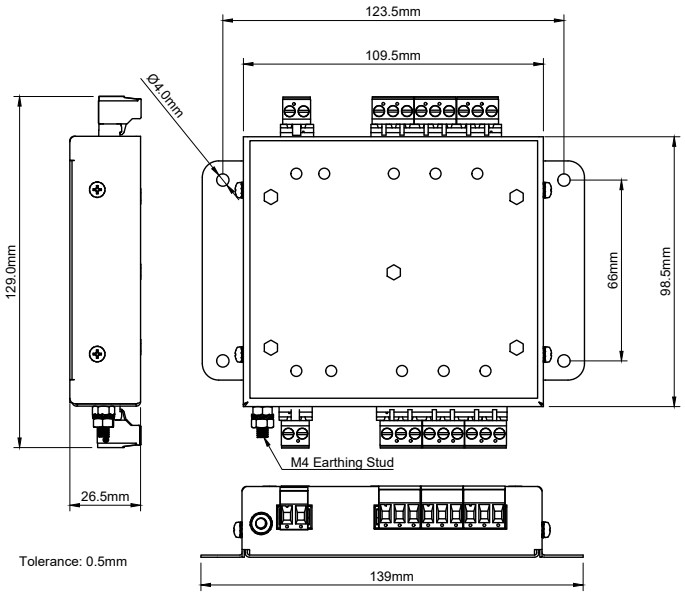
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PRO-NBF-1 Specifications

Technical Specifications

Power Supply	
Input Supply Voltage	9 to 35V DC
Input Supply Current	150mA max @ 12V DC (all outputs @ full drive into 100Ω loads)
Input Protection	Continuous reverse polarity and ESD protection
Power Indicator	LED, Blue - Indicates unit is functioning correctly
Input Supply Connector	Pluggable 2 way screw terminal, 5.08mm pitch (12 to 30 AWG)
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
Speed / bit rate	4800 to 115200 bps
Talker Output Voltage drive	>= 2.2V (differential) into 100Ω
Talker Output Current drive	20mA rated.
Talker Output Protection	Short circuit and ESD
Talker Data Indicator	LED, Orange (Flashes at data rate)
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 to indicate valid input)
Connectors	Pluggable 2/3-way screw terminals, 5.08mm pitch (12 to 30 AWG)
Isolation	
NMEA 0183 Listener	OPTO-Isolated, Hi-Pot tested to 1000V
NMEA 0183 Talker	Uses IsoDrive™, Hi-Pot tested to 1000V
Mechanical	
Housing Material	316L Stainless Steel
Dimensions	139mm (W) x 129mm (H) x 26.5mm (D)
Weight	335g
Mounting	Bulkhead mount or DIN rail mount (DIN kit 1)
Approvals and Certifications	
EMC	IEC 60945:2002-08, DNVGL-CG-0339:2019 & IACS UR E10 Rev7
Compass safe distance	600mm
Type Approval Certificate	RINA (transitioning to DNV)
Operating Temperature	-25 to +70°C
Storage Temperature	-40 to +85°C
Maximum Relative Humidity (RH)	95% @ 55°C
Environmental Protection	IP40
Guarantee	5 Years

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 1000 volts D.C from system ground.

Part Number	Description
PRO-NBF-1	1 OPTO Input, 6 ISO-Drive outputs professional Type Approved buffer
	Accessory Description
DIN-KIT-1	Kit of 2 clips & 4 screws. Use with top hat (EN 50 022) or G section (EN 50 035) rails
A-CONPACK-PNBF1	Pluggable Screwless Terminal pack for PRO-NBF-1
SRB-90	Kit of 2 x 90mm Stainless Steel Strain Relief Brackets
USBKIT-PRO	USB To Serial Adapter for use with PRO range products

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