

# Actisense<sup>®</sup>

## NMEA Buffer NBF-3

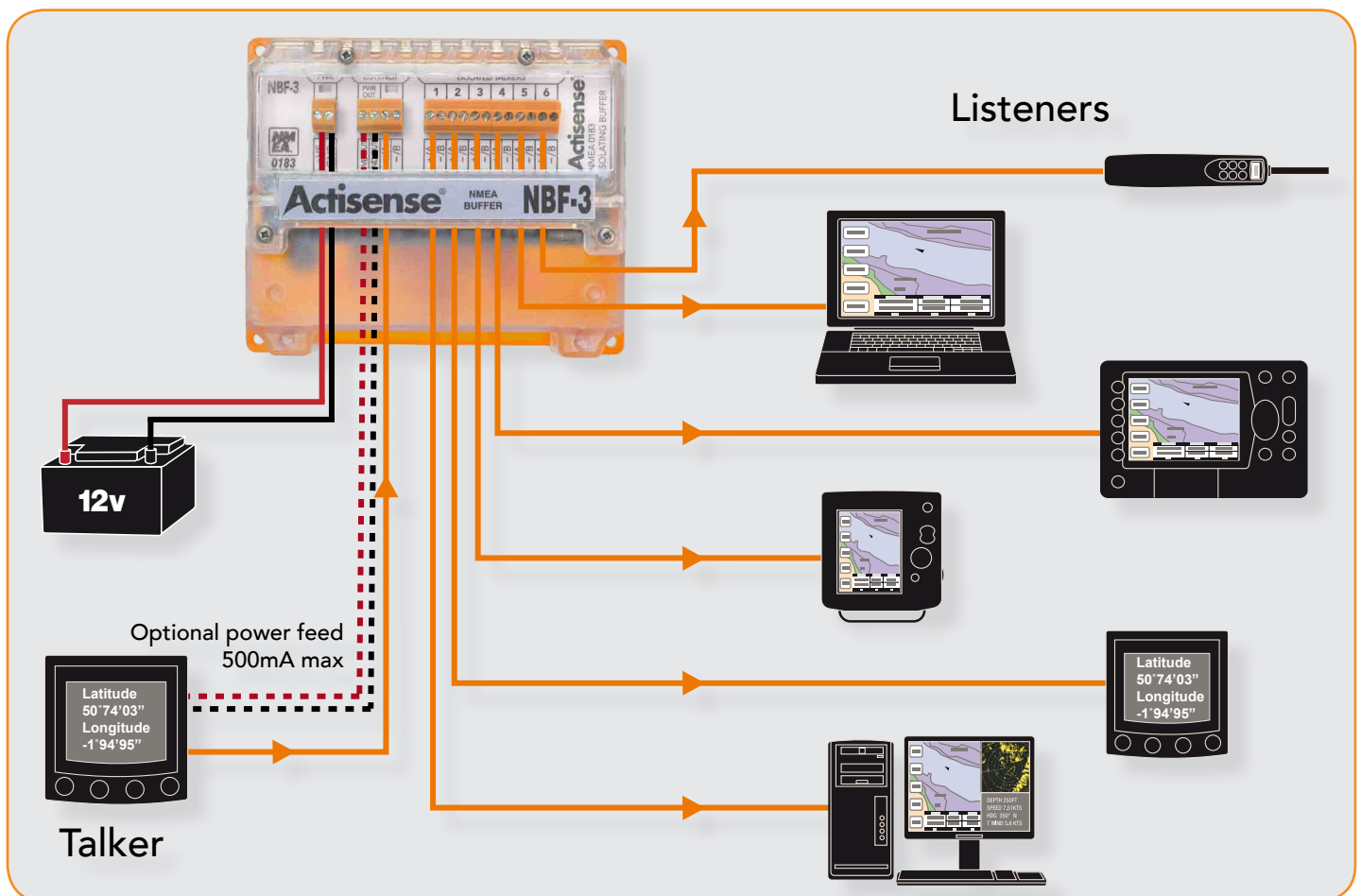
The NBF-3 offers the best solution for driving multiple NMEA<sup>®</sup> 0183 devices. Isolation on the input and each output allows non isolated devices to be connected safely.

Designed with a diagnostic LED on the input, pluggable connectors for quick and easy installation and a specially designed case with DIN rail option.

The addition of power distribution for NMEA Talker allows a single cable to connect power and data to the Talker.



### Example Configuration



## NBF-3 Technical Specifications

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
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 (PTC resettable fuse)
Listener Power Output Connector	Pluggable 2 way screw terminal, 3.5mm pitch

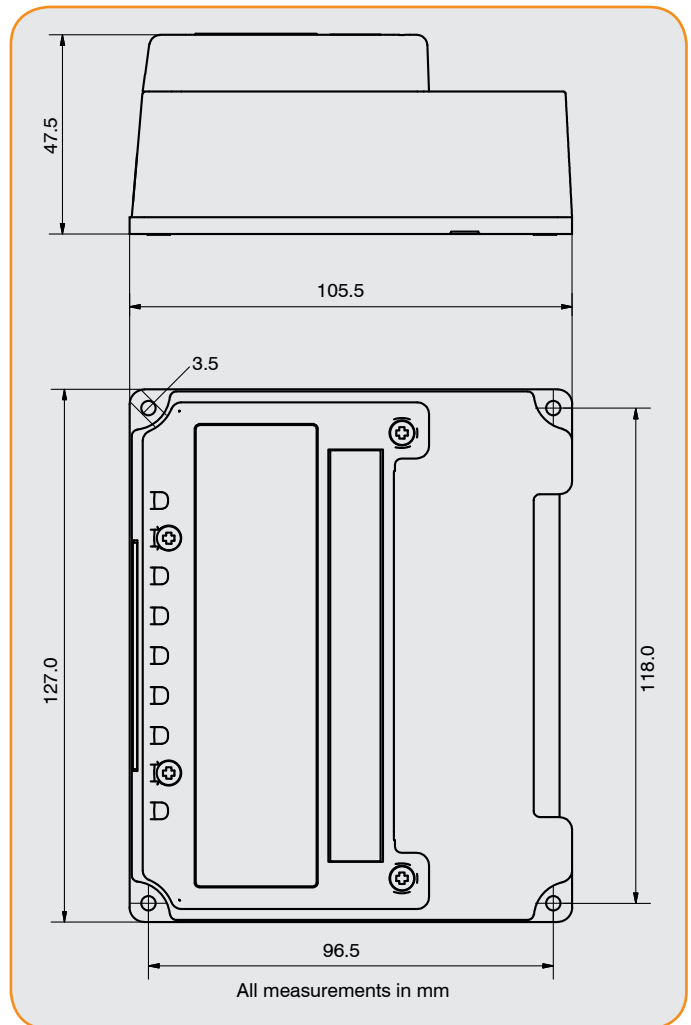
NMEA 0183 Port - Listener & Talker	
Number of Listener/Input Ports	One NMEA 0183 Listener
Number of Talker/Output Ports	Six isolated NMEA 0183 Talkers
Compatibility	Fully NMEA 0183, RS422 & RS232 compatible. RS485 Listener compatible
Galvanic Isolation	2500V input to ground 1500V output to ground using 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	IEC60945 (sections 9 & 10)
Environmental Protection	IP66
Operating Temperature	-20°C to +70°C
Storage Temperature	-40°C to +85°C
Relative Humidity	0 to 80% RH
Guarantee	3 years

All specifications are taken with reference to an ambient temperature (TA) of +25°C.

Mechanical	
Housing Material	Polycarbonate
Protective Lid Material	Polycarbonate
Sealing Materials	Expanded silicone foam gasket, closed cell polyurethane splash guard and ePTFE waterproof 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.

### Dimensions



Part Number	Description
NBF-3-BAS	NMEA Buffer with an OPTO input, 6 ISO-Drive outputs and Talker power feed
Accessory Description	
DIN-KIT-1	DIN Rail mounting kit suitable for use with rail types: Top hat rail EN 50 022 or G section rail EN 50 035