

Actisense[®]

OPTO-4

NMEA 0183 Serial Opto Isolator



Features

- One RS422 OPTO-isolated input
- One RS422 (NMEA 0183) output
- Up to 115200 baud

Advantage

- ✓ Meets NMEA 0183 isolation requirements for Listener devices
- ✓ Provides transient overvoltage protection
- ✓ Covers all commonly used baud rates

Benefits

- ✓ Protects PC input/receiver from damage
- ✓ Protects connected equipment from transient overvoltages from PC
- ✓ Wide compatibility

- Port powered

- Ruggedised casing

- Small footprint

- ✓ Powered from host DB9 port so no additional power supply required
- ✓ Highly durable IP67 rated waterproof enclosure
- ✓ Electronics contained in Overmoulded DB9 enclosure

- ✓ Quick and easy to install
- ✓ Suitable for wet and harsh environments
- ✓ Easy installation in tight spaces

OPTO-4

GEEK MODE ON



NMEA 0183 Serial Opto Isolator



Add isolation to an RS232 port to protect against ground loops.

The OPTO-4 provides a safe and low cost way of connecting an RS422 (NMEA 0183) system to an RS232 (PC COM port) system, or any other device with a standard RS232 9-pin port.

The OPTO-4 provides comprehensive galvanic OPTO-isolation to protect the PC input/receiver, plus important spike suppression to improve the PC output/transmitter protection. Initially designed for systems wishing to receive NMEA 0183 data without the risk of ground loop damage, the flexible OPTO-4 can be used to interface any RS422 and standard RS232 connection, whilst powering itself from the RS232 port, making installation simple and very quick.

Part Number: A-OPTO-4

Electrical	
Galvanic Isolation	NMEA Listener Only
NMEA Listener / Input Voltage	+/-15V Continuous Maximum +/-35V Max < 1 Second
NMEA Listener / Input Signal Thresholds	Logic '0' +2V to +15V, Logic '1' -15V to 0V
NMEA Talker / Output Voltage & Current	Dependant on Host RS232 Interface. Typically +/-7V to +/-15V @ 10mA Max
RS232 Voltage on Host	+/-7V to +/-15V
RS232 Port Total Current Consumption	2mA to 5mA depending on RS232 Voltage
Speed / Baud Rate	4800 to 115200 Baud
Mechanical	
Housing Material	PVC Black
Thumb Screw Material	PVC Orange
Screw	Steel, Nickel Plated, M2.8 Thread
DB9 Connector	9 Pin Female
Cable Length	1.5m
Cable Wire	22AWG (17/34AWG) Tinned Stranded Copper
Cable Jacket	PVC
Shield	Al Mylar Foil
Cable Outer Diameter	5.5mm
Approvals and Certifications	
Operating Temperature	-20°C to +70°C
Electrical Specification	Meets IEC 61162-2
Weight	100g
Guarantee	3 Years
UL Certification	Cable E137250
RoHS Compliant	

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