



XP15 NMEA 0183 Expander

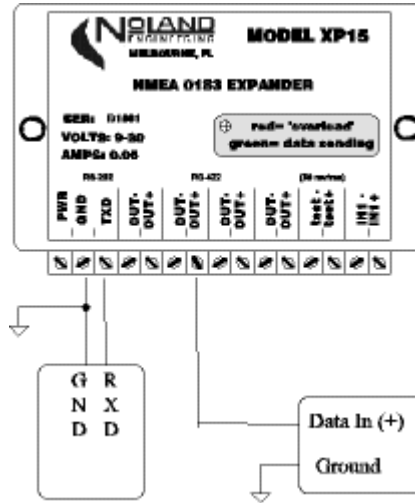
The XP15 Expander is an advanced version of its predecessor (XP14) with an additional output, a bicolor status LED and more short circuit protection on the outputs. It enables NMEA 0183 talkers to drive multiple listeners where necessary. It provides a single opto-isolated input and four independent differential (RS-422) outputs plus a fifth RS-232 output for driving single-ended listeners, such as PC's. Although intended for 4800 baud operation, it will also operate at 9600 baud.

Many marine instruments, although compliant with the NMEA 0183 specification, do not provide sufficient drive capability for multiple listeners. To overcome this, the XP15 has five outputs, each of which can drive multiple listeners if needed. All outputs are isolated from each other, so that shorting one will not affect the others. If too many listeners are connected or if any of the outputs are shorted, the LED will turn "red" indicating an "overload" has occurred.

The XP15 can operate on any DC voltage from 9-30 Vdc. A bicolor LED on the unit flashes green when input data is detected, but will turn red if a supply current overload occurs. A pair of test terminals (**test+ / test-**) can also be used to determine supply current by connecting them to an external voltmeter.

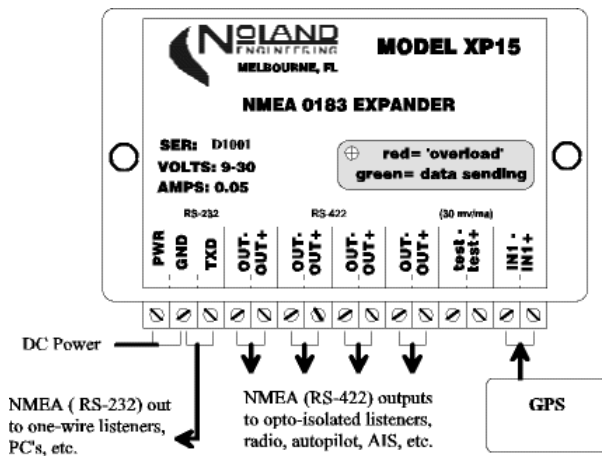
XP15 Specifications

Supply Voltage	9-30 Vdc
Input Isolation	5000 V (opto-isol)
Input Impedance	>1K ohm
RS-422 Output	4.0V typ. into 500 ohms
RS-232 Output	+/- 8V @ 10ma typ.
Data Rate	9600 baud max.
Overload Indicator	>50ma
Size	3.75 x 2.75 x 1.0 in.
Weight	4 oz.
Warranty	2 year replacement
Operating Temp (degC)	0 - 50
Humidity Range	0 - 100% (non-condensing)
Case packaging	ABS Plastic



When connecting NMEA listeners to the XP15 outputs, observe the following:

*Only connect the RS-422 outputs to RS-422 or opto-isolated listeners. If any output (**OUT-**) is connected to a single-ended (grounded) listener, the red LED will turn on indicating an output overload. In such cases, listeners with their (-) input grounded such as PC's, should connect the RS-232 output, **TXD** to the listener's "Data In." (See accompanying figure.)*



Typical Installation



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