

MANUAL

MODEL XS25 NMEA 0183 Auto-Switching Expander

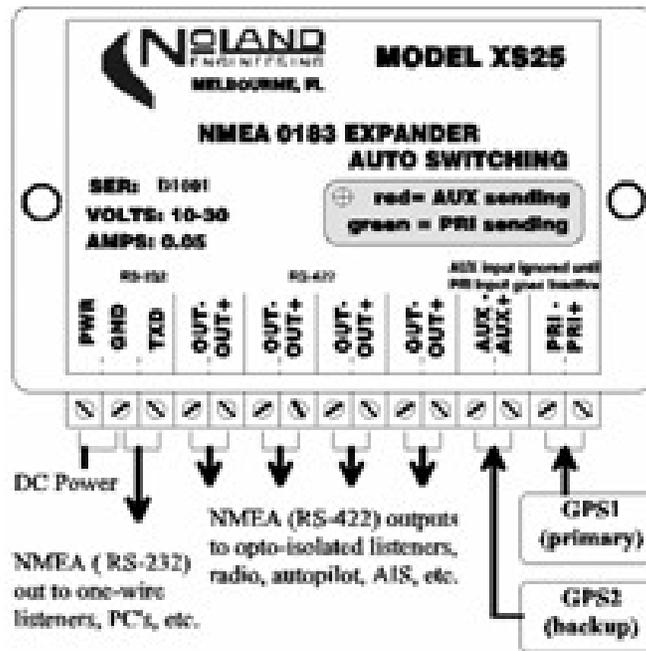
DESCRIPTION: The XS25 Auto-Switching Expander selects between two data inputs, PRImary and AUXiliary (backup). The PRImary input is always selected as the data source unless its data should disappear for several seconds. The AUXiliary input then becomes selected as the input data source until data is restored on the PRImary input. The switchback to PRImary is immediate.

In addition to the auto-switching feature, the XS25 enables NMEA 0183 talkers to drive multiple listeners where necessary. Many marine instruments, although compliant with the NMEA 0183 specification, do not provide sufficient drive capability for multiple

listeners. To overcome this, the XS25 has five outputs, each of which can drive multiple listeners if needed.

The XS25 has two opto-isolated inputs and four independent differential RS-422 outputs plus a fifth RS-232 output for driving single-ended listeners such as PC's. All outputs are isolated from each other, so that shorting one will not affect the others.

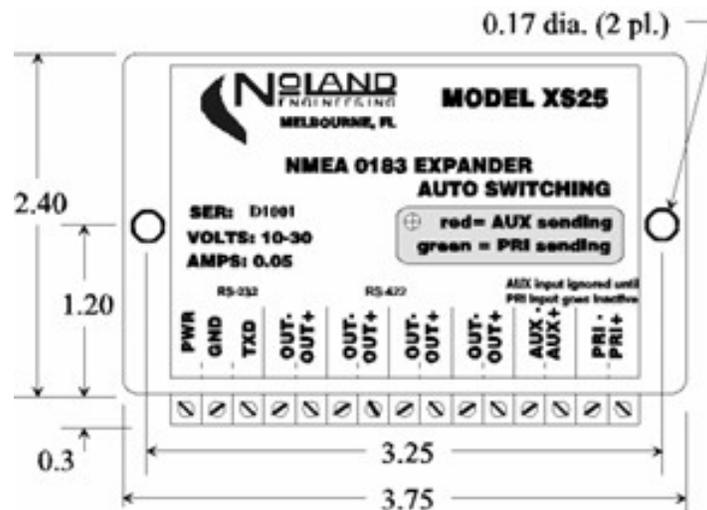
The XS25 can operate on any DC voltage from 10-30 Vdc. A bicolor LED flashes green when **PR**imary input data is detected, but will turn red when switched to **AUX**iliary input mode. Although intended for 4800 baud operation, it will also operate at 9600 baud.



TYPICAL INSTALLATION The above example shows a typical installation. The inputs shown are a **PR**imary and **AUX**iliary GPS but any NMEA 0183 talkers can be used. If both GPS's are sending data the outputs will send data only from the **PR**imary input and the LED will flash green. If the **PR**imary input stops receiving data for about 4 secs, the unit will automatically switch to the **AUX**iliary input and the LED will flash red. Restoration of the **PR**imary input will cause an immediate switchback and the LED will change back to flashing green.

Specifications

Supply Voltage	10-30 Vdc
Input Impedance	>1K ohm
RS-422 Outputs	2.5V typ. into 150 ohms
RS-232 Output	+/- 8V @ 10ma typ.
Data Rate	38,400 baud max.
Overload Indicator	>80ma (V _{test} = 1.6 volts)
Size	3.75 x 2.75 x 1.0 in.
Weight	4 oz.
Warranty	2 years



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