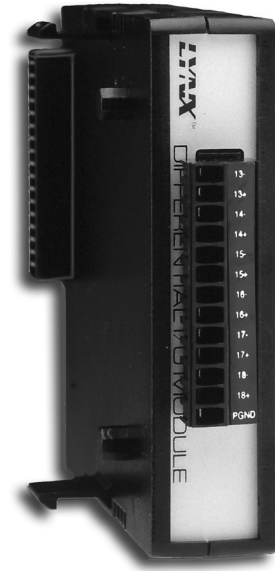


# LYNX™ EXPANSION MODULE

## HIGH-SPEED DIFFERENTIAL I/O

### FEATURES

- Low Cost
- 6 High Speed 0 to +5 VDC Differential I/O Channels
- 3 Clock Types: Step/Direction, Up/Down, Quadrature
- Programmable Digital Filtering for Inputs
- Adds the Capability for:
  - Closed Loop Control
  - Electronic Gearing
  - Registration Applications
  - Up to 2 Additional Axes for Sequential Motion Control
- Plugs Directly into the LYNX Control Module
- Removable Screw Terminal Connection



### DESCRIPTION

The High Speed Differential I/O Module adds 6 high speed 0 to +5 VDC differential I/O channels to the LYNX motion control system. The channels can be used differentially or single ended as inputs or outputs.

The Differential Module can be used for a variety of applications, including: closed loop control using an incremental encoder, registration, electronic gearing and sequential control of up to two additional axes. These channels may also be used for 0 to +5 VDC high speed general purpose I/O.

The I/O channels may be individually programmed by the user to be one of three clock types: Step/Direction (output only), Up/Down (input or output), or Quadrature (input or output).

When used as inputs, these I/O channels have seven programmable digital filter settings ranging from 39.1 kHz to 5.0 MHz.

### ELECTRICAL SPECIFICATIONS

Differential Input Threshold .....	-0.2 to +0.2 volts
Input Hysteresis.....	60 millivolts typical
Input Common Mode Range.....	-6 to +6 volts
Open Circuit Input Voltage	
Positive Input.....	4.3 volts
Negative Input.....	1.4 volts
Output Voltage (each output).....	No Load/6 milliamp load
Logic "0".....	0.5 volts/0.8 volts
Logic "1".....	4.5 volts/4.2 volts
Short Circuit Current.....	250 mA max
Filter Cutoff Frequencies.....	5.00, 2.50, 1.25 MHz
	625, 313, 156, 78.1, 39.1 kHz

### MECHANICAL SPECIFICATIONS

Dimensions in Inches (mm)

