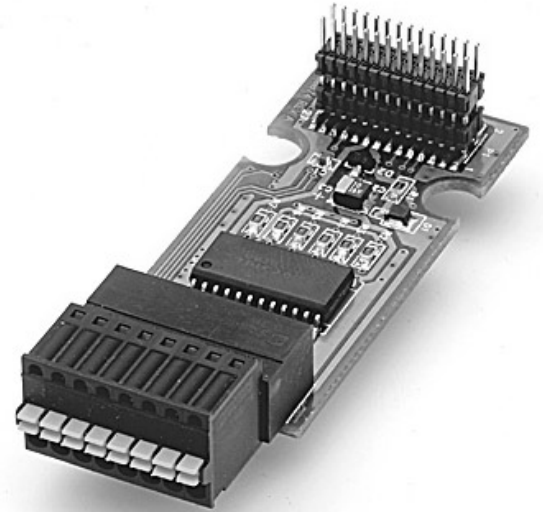


# MICRO LYNX™ EXPANSION MODULE

## ISOLATED DIGITAL I/O



### FEATURES

- Low Cost
- Six +5 to +24 VDC Isolated I/O Channels
- I/O Lines Software Configurable as Input or Output
- I/O User Definable as Dedicated or General Purpose
- Programmable Digital Filtering for Inputs
- 350 mA Current Sink Capability per Channel
- Over Temperature and Short Circuit Protected
- Inductive Current Clamp
- Switch Selectable Pull-up to +5 VDC or External Voltage
- Plugs Directly into MicroLYNX Controller
- Removable Terminal Strip or Pin Header

### DESCRIPTION

The Isolated Digital I/O Module adds an additional six +5 to +24 VDC isolated I/O channels to the MicroLYNX. All of the I/O channels can be individually programmed as either inputs or outputs, or as dedicated (limit, home, etc.) or general purpose.

When used as inputs, these I/O channels have seven programmable digital filter settings ranging from 215 Hz to 27.5 kHz. As outputs, each channel can sink up to 350 mA. The I/O is isolated from the power supply ground.

A 7.5kOhm switch selectable pull-up resistor is provided for each I/O channel. The six I/O channels may be pulled up to either the internal +5 VDC supply or an external voltage provided by the user. Protection circuitry includes over temperature, short circuit and inductive current clamp.

### PIN & SWITCH ASSIGNMENTS

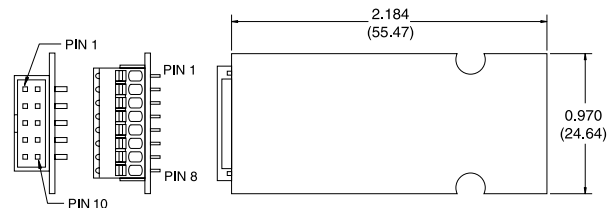
PIN	CONNECTOR OPTION	
	TERMINAL BLOCK	PIN HEADER
1	V PULL-UP	I/O CHANNEL 1
2	I/O CHANNEL 1	I/O CHANNEL 2
3	I/O CHANNEL 2	V PULL-UP
4	I/O CHANNEL 3	I/O CHANNEL 3
5	I/O CHANNEL 4	NO CONNECT
6	I/O CHANNEL 5	I/O CHANNEL 4
7	I/O CHANNEL 6	NO CONNECT
8	I/O GROUND	I/O CHANNEL 5
9		NO CONNECT
10		I/O CHANNEL 6

PIN	SWITCH	FUNCTION
1-6	1/O 1-6	Pull-up on/off Switches for I/O Lines 1-6

### ELECTRICAL SPECIFICATIONS

Input Voltage Range .....	0 to +24 VDC
Input Low Level .....	< 1.5 volts
Input High Level .....	> 3.5 volts
Open Circuit Input/Output Voltage	
Pull-up Switch On (internal supply).....	4.5 volts
Pull-up Switch Off.....	0 volts
Load Supply Voltage .....	28 VDC max (transient protected at 60 volts)
FET on Resistance .....	2 ohm max (Tj=125° C)
Continuous Sink Current.....	350 mA max each output (Ta=25° C)
Maximum Group Sink.....	1.5 amp (thermally limited)
Filter Cutoff Frequencies.....	27.5, 13.7, 6.89, 3.44, 1.72 kHz 860, 430, 215 Hz

### INTERFACE INFORMATION



#### NOTE:

Terminal Block  
Mating Connector  
**Supplied.**

Pin Header  
Mating Connector  
**Not Supplied.**

Order Information at  
[www.imshome.com/quick.html](http://www.imshome.com/quick.html)

### ENVIRONMENTAL

Storage Temperature .....	-20 to +70° C
Operating Temperature.....	0 to +50° C
Humidity.....	0 to 90% non-condensing

### ORDER INFORMATION

PART NUMBER	TERMINAL BLOCK	PIN HEADER
		<b><i>MX-DI100-000</i></b>

Standard product shown in bold italics. Lead times may apply to other versions.