

LMIO-101 Digital Input/Output Interface

Input/output interface for integration of third party devices

Component of Digital Lighting Management integrated control systems

Hinged dust cover protecting two RJ45 ports



Isolated relay output and inputs for up to three control devices

Fits into standard single gang wallbox; optional DIN rail mounting

Status LED for each input and output

PROJECT
LOCATION/TYPE

Product Overview

Description

The LMIO-101 Digital Input/Output Interface allows seamless integration with third party devices to provide additional functionality in a Digital Lighting Management (DLM) system.

Operation

The LMIO-101 operates on power from the DLM local network. It contains a 24VDC isolated relay (single-pole, double throw with normally open (N/O), normally closed (N/C), and common outputs) for output to other systems. The isolated relay can respond to any DLM occupancy sensor on the DLM local network. The LMIO-101 also includes a 24VDC output and four input terminals for maintained or momentary switch closure inputs, or third party logic inputs. Input signals may come from a wide variety of devices including building automation systems, time clocks and key switches, for purposes including hold-on/hold-off, load shedding and cleaning. The LMIO-101 has DIP switch-selectable profiles to allow different combinations of input signals to control different loads.

Default and Personalized Operation

In Plug n' Go automatic configuration mode, the isolated relay responds to every occupancy sensor on the DLM local network. Unlike the LMRL-100, the LMIO-101 can be reconfigured to respond only to selected occupancy sensors. Default operation for third party inputs is based on the configuration of the device's DIP switches. To change the occupancy sensor assignment, the user must access Push n' Learn mode, either directly from the LMIO device or via the LMCS software. With Push n' Learn, users may assign any load or sensor in a DLM local network to any input on the LMIO device.

Applications

The LMIO-101 is ideal for applications where integration of third party devices with lighting control is desired. The isolated relay allows coordinated control of lighting and HVAC based on occupancy detection while the multiple inputs permit control of any load on a DLM local network by other equipment, systems and devices. Applications include private and open offices, conference rooms, classrooms, training centers, lunch rooms and break rooms.

Features

- Plug n' Go configuration for quick and easy startup out of the box
- Push n' Learn functionality for personalizing system settings to accommodate application needs
- Self-contained switching power supply and relay system
- Five status LEDs and configuration LED
- Hold-on/hold-off, occupancy sensor, time clock, load shed, cleaning switch and key switch modes available through DIP switch configurations
- Over-current protection
- UL 2043 plenum rated
- RoHS compliant
- Qualifies for ARRA-funded public works projects

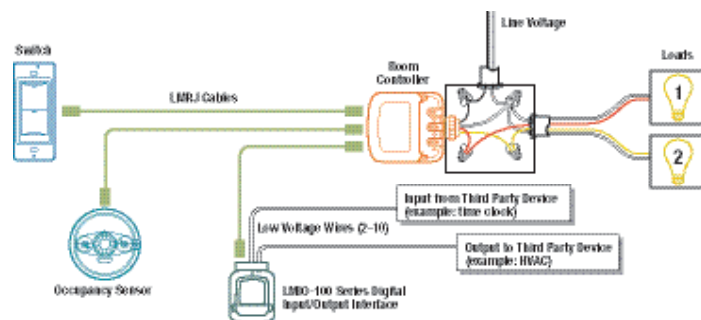


Specifications

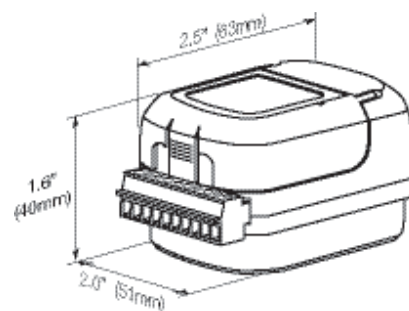
- Input/output voltage: 24VDC from DLM network
- Maximum current consumption: 20mA
- DLN local network connection: 2 RJ45 ports
- Removable terminal block for connections to isolated relay output and third party inputs
- Isolated relay ratings:
 - 24VDC/VAC, 1A, SPDT
 - Normally open (N/O), normally closed (N/C) and common outputs
- Input ratings:
 - Input max. sink/source current: 1- 5 mA
 - Logic input signal voltage High: >18 VDC
 - Logic input signal voltage Low: < 2 VDC
- Operating conditions; for indoor use only; 32-131°F (0-55°C)
- Fits inside 4" x 4" j-box, 1 gang back box or 3" octagonal box; optional DIN rail mounting
- UL and cUL listing pending
- Five year warranty

Wiring & Connection

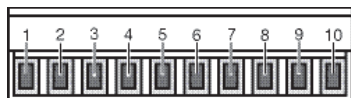
Connection to DLM Network



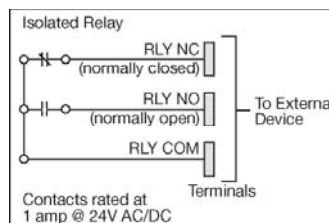
Dimensions



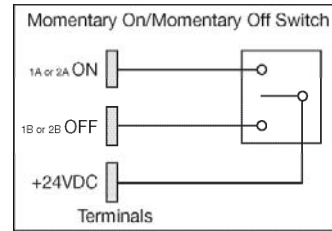
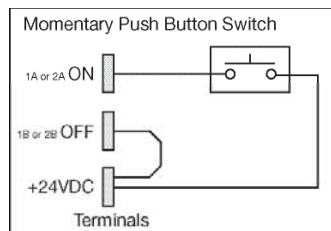
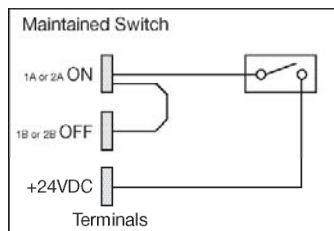
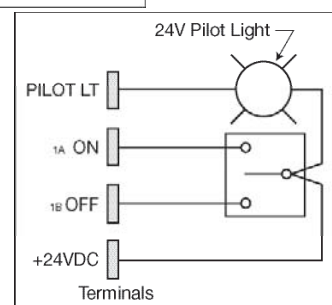
Wiring to 10-Position Terminal Block



Position (L - R)	Description
1	Relay Normally Open (N/O)
2	Relay Common
3	Relay Normally Closed (N/C)
4	COMMON
5	+24 VDC
6	Input 1A
7	Input 1B
8	Input 2A
9	Input 2B
10	Pilot Light



The isolated relay output is on terminals 1, 2 and 3. The relay responds to a signal from any DLM sensor.



Contact closure inputs from up to two low voltage switches are wired to inputs 1A (on) and 1B (off), terminals 6 & 7, and inputs 2A (on) and 2B (off), terminals 8 and 9. The LMIO-101 provides 24VDC to the switches on terminal 5.

Up to 3 logic inputs (e.g. load shed, hold-on/hold-off) from third party devices are wired to terminals 6, 7, 8 and 4 (common). The power for these inputs is provided by the logic device.

Ordering Information

Catalog No.	Description
<input type="checkbox"/> LMIO-101	Digital Input/Output Interface
<input type="checkbox"/> LMIO-101-U	