

## Product Information

### MOTOR CONTROLLER - DOLI MODULE WITH MODBUS INTERFACE

The DIIO-MC-DOL1 is part of the D.I.I.O family of products.

This module is specifically programmed to control one Direct On-Line starter either via local push buttons (Local Mode) or remotely via a SCADA system (Remote Mode). It also provides information such as trip and control failure alarm indications and run indication.

Modbus RTU is implemented on a configurable serial port as Non Isolated RS232, Non Isolated RS485 or Isolated RS485.

Status indications are available for communications activity, system watchdog, power indication and the various digital input statuses.



**D.I.I.O. System Module**  
**Motor Controller - Direct-On-Line, Variation 1**  
**(DIIO-MC-DOL1)**

## Summary of Features

- Electrical:** 8 Isolated or Non Isolated Digital Inputs \*  
 5300 VRMS Optical Isolation Protection  
 Relay Outputs with switching capabilities of 2A @ 30VDC or 0.5A @ 125VAC  
 Power Supply 10VDC to 30VDC \*
- Comms:** RS232 or RS485, Isolated or Non Isolated \*  
 Modbus RTU Protocol, Baud: 9600-38400, Parity: None/Odd/Even/Mark/Space  
 Configurable Modbus Address via software
- Hardware:** Removable Plug-in Terminals. Wire Connection from 28 to 16 AWG (1.5mm<sup>2</sup>)  
 DIN Rail Mounted Metal Enclosure  
 Push Buttons for Comms. Parameters Reset and Device Reset  
 Plug In Card Internal Configuration. Inputs paired in two channels per card.  
 Separate Comms Card, Power Supply and IO Cards.
- Software:** Communication parameters are configured via a windows based software.

\* Different Part Number have to be ordered for the various configurations

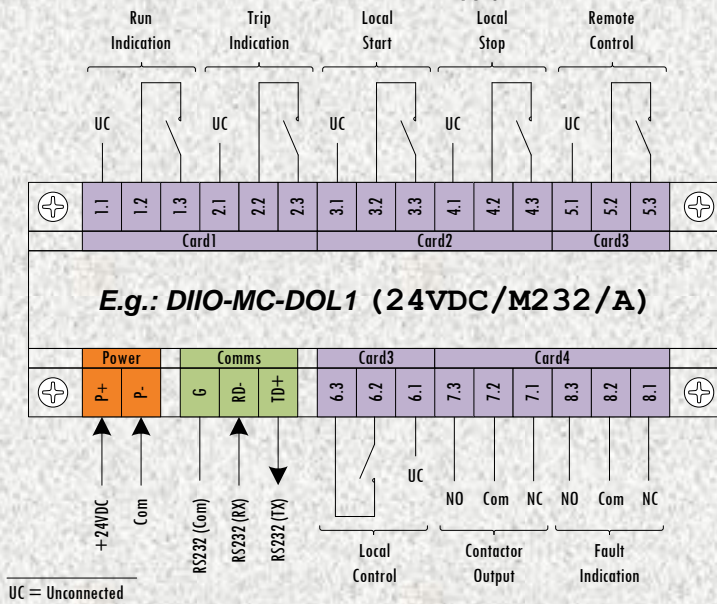


**Top Connections - IOs 1 to 5**



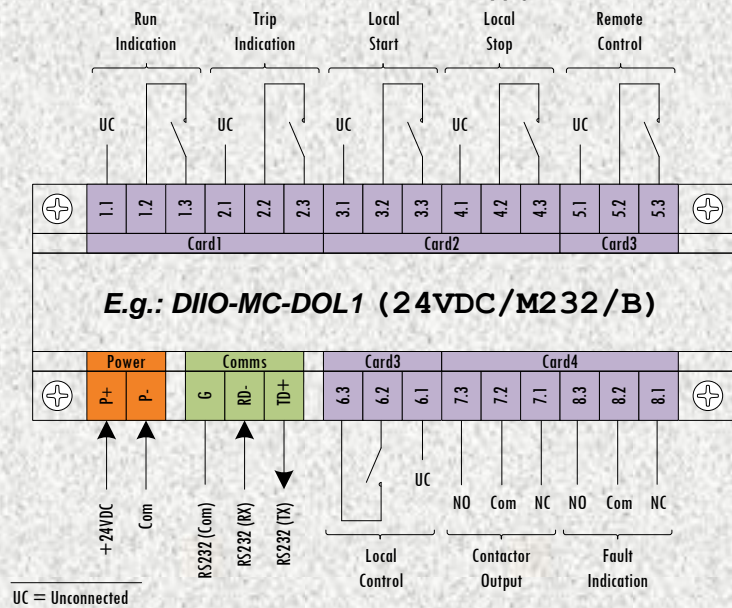
**Bottom Connections - Power Supply, Communications and IOs 6 to 8**

**Option A: Input Circuits are internally supplied by an isolated +5VDC Supply**



**Isolated Inputs**

**Option B: Input Circuits are internally supplied by a non isolated +5VDC Supply**



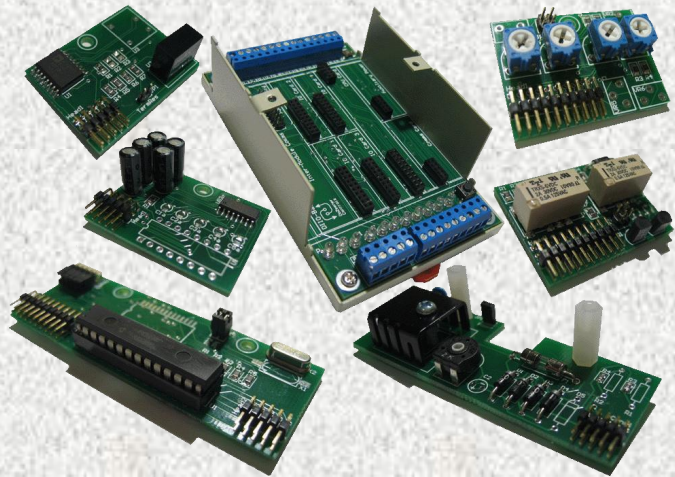
**Non Isolated Inputs**

## Card Configuration:

This device is part of the D.I.I.O. family of devices. Each device consists of a back plane and plug-in cards assembled to carry out the desired function of the module.

Cards are available for digital outputs, digital inputs, analogue outputs, analogue inputs, power supplies, CPU and communications.

A Modbus network controller is also available in the range, that manages Modbus traffic making this system ideal for controlling remote equipment with few easy configuration steps.



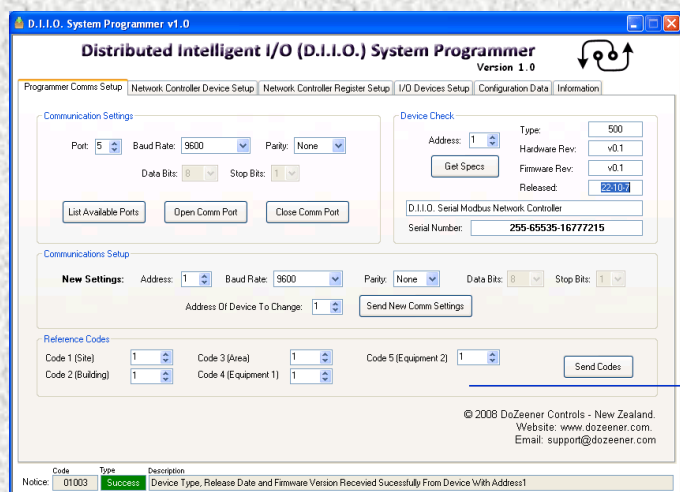
## Programming Software:

Each device in the D.I.I.O. family of devices can be configured via one software environment offered for free with each device or system.

The D.I.I.O. System Programmer can either be used to program individual devices or the network controller, which controls the flow of information across the system.

This software has been developed using the latest .NET environment and is very intuitive and easy to use.

Communication parameters and Modbus addresses can be changed using this software with a press of a button.



## Ordering Codes:

Ordering codes consist of two components, the device code and card configuration options.

**Eg:**     DIIIO-MC-DOL1 (12VDC/MI485/A)

### Device Code (Power Supply/Communications Card/IO Card Configuration)

**Power Supply Options:**     12VDC: 12VDC Power Supply

                                  24VDC: 24VDC Power Supply

**Comms Card Options:**     MI485 : Isolated RS485

                                  MN485 : Non Isolated RS485

                                  MN232 : Non Isolated RS232

**IO Card Options:**         A: (Config. Type A: Isolated Internal 5VDC Supply for DI's)

                                  B: (Config Type B: Non-Isolated Internal Supply for DI's)

All requests for quotations should be sent to the email: enquiry@dozeener.com