


Specifications	
Inputs	
Quantity	: 8
Required dc potential of the monitored input	: > 4,5 V dc and < 200 V dc
Sensing current	: < 0,55 mA
Closed/open resistance	: R _{ON} <2 kΩ : R _{OFF} >20 kΩ
Sensing cable capacitance	: <100 nF
Response time	: 15 ms (an input must maintain its state for at least 15 ms in order for its state to be detected)
Insulation resistance	: 1000 MΩ minimum at 500 V dc (between field and bus)
Isolation	: 1 500 V ac, 50/60 Hz for 1 minute (transformer)
Electrical Connections	
Wire Gauge	: 2,0 mm ² (maximum)#
# For manageable cable to the modules, a conductor size of up to 0,5mm ² , with a maximum overall outside diameter of 2 mm, is recommended.	
Power Consumption (from base)	
Supply Voltage	: 5 V ±5%
Current Consumption	: 80 mA maximum
Diagnostic Indicators (LEDs)	
8 x I/P (Input) (green)	: LED ON = Contact closed
Identification Codes	
Scan Code	: 6
Module ID	: 1
Environment	
Operating Temperature	: -25°C to +60°C (-13°F to +140°F)
Storage Temperature	: -40°C to +70°C (-40°F to +158°F)
Relative Humidity	: 95% at 40°C (104°F) (non-condensing)
Mass	
Including packaging	: 410g (14,5 oz)
Excluding packaging	: 320g (11,3 oz)
Ordering Information	
Order Code	: M1321A



INSTALLATION GUIDE

8 Digital Input (8 DI-C) module M1321A

General Description

The Maxiflex M1321A I/O module provides 8 digital inputs with full channel isolation and can monitor the condition of potential-free contacts or contacts with dc potential across them. Each input uses two sensing wires, fully isolated from each other, to detect the status of the input which is displayed on a 2 x 4 LED matrix on the front of the module.

An 8-bit data word is read by the Maxiflex CPU from the module where each bit corresponds to one input. A logic "1" corresponds to a closed input.

A scan and module ID is used by the CPU for addressing and diagnostics. If the module is removed or becomes faulty, this status will be detected by the CPU immediately, and can be read via the network.

The hot plug-in/plug-out feature allows module insertion or removal from a Maxiflex base while the base is powered.

Module Positioning

The M1321A must be installed in one of the I/O positions of the base.

Refer to the Maxiflex Bases General Instruction (P/N 98-8952-930-00X) for more detail on base layout, module insertion and module removal.

Electrical Installation

Power for the module is drawn from the base, so the only field connections required are to the inputs.

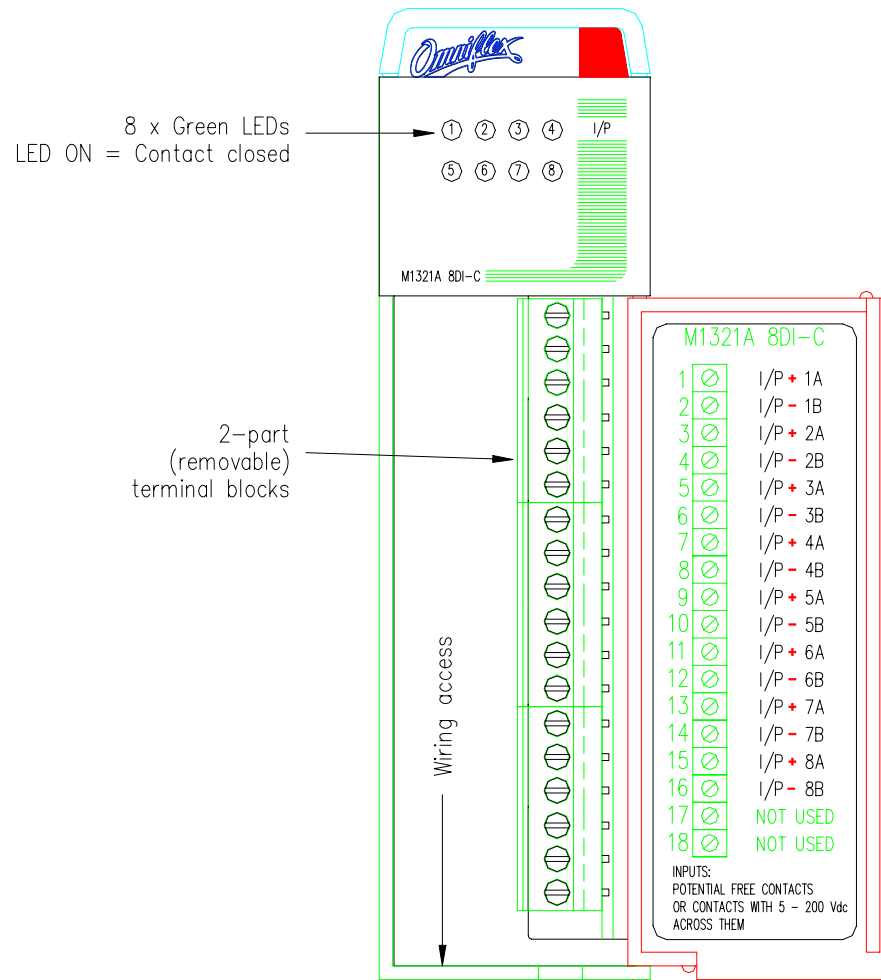
The M1321A module feature hot plug-in/plug-out which allows module insertion or removal from a Maxiflex base while the base is powered.

Potential-free contacts as well as dc potential contacts can be monitored.

Note that the external dc voltage must NOT be present directly across the input, as the module will not register any change of state.

Each input has a 1A protection diode which conducts if an external dc voltage is connected directly to the input. However, if the current from the external power supply exceeds 1A, the protection diode and possibly the input stage will be blown.

Figure 1 : Layout of the M1321A



Note: The LEDs can only be seen when illuminated, as they are located behind the LED cover.

Figure 2 : Layout of the 7 I/O Master Base

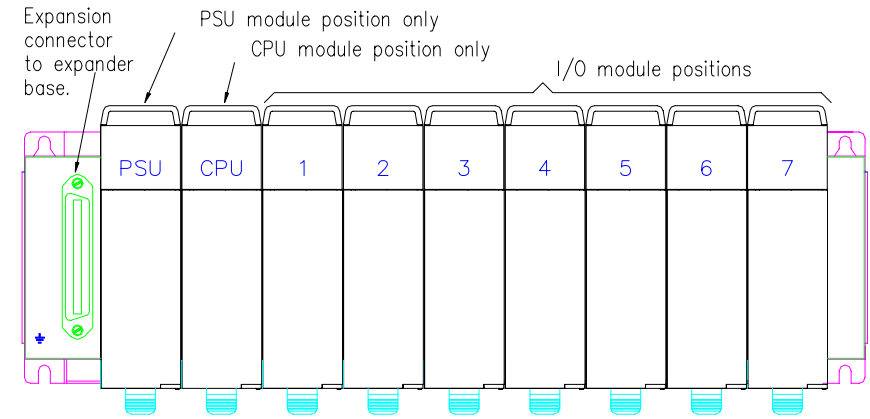


Figure 3 : Electrical Connections

