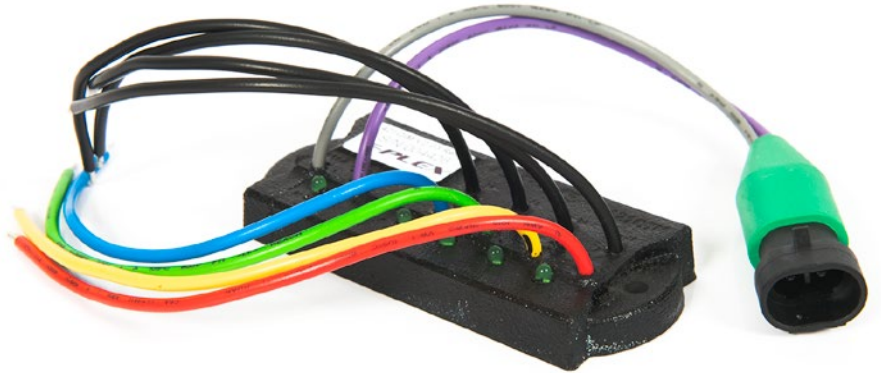


# Quad Input Module



## Introduction

The E-Plex 421QIM is an active low digital input module. It provides four channels of digital I/O in an encapsulated unit to detect inputs from equipment that switches to ground. The module has LEDs which will provide local verification of the status of the inputs.

## Key Features

- Four active low digital inputs.
- Local LED status indication.
- LEN value 4.

## Electrical Specifications

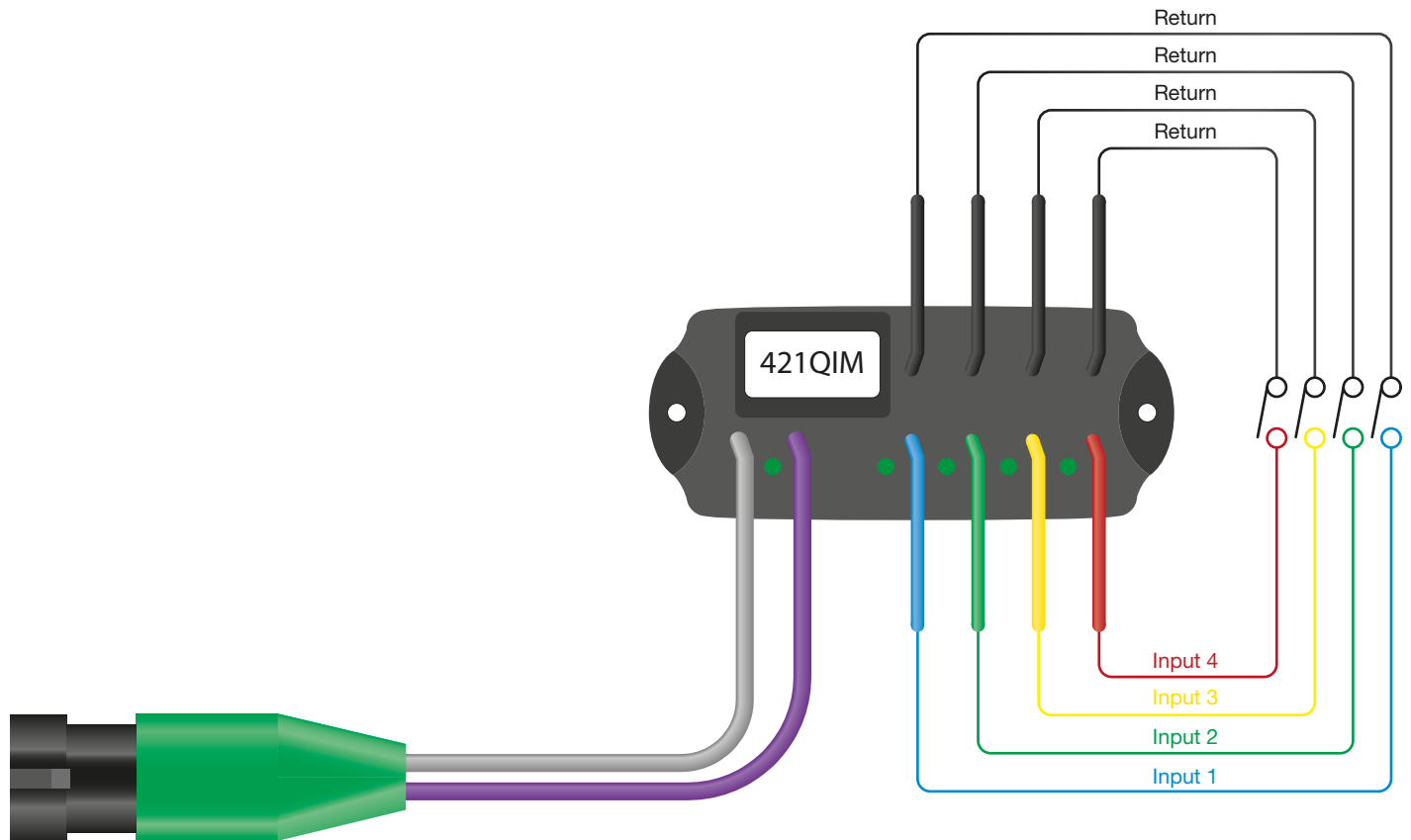
- Operating Voltage: 10VDC to 32VDC.
- Operating Current: 20mA to 45mA (with all LEDs active at max voltage).
- Input Low Threshold: - 0.5VDC to 1.0VDC.
- Input High Threshold: 4.6VDC to 32VDC.

## Design Specifications

- Shock: Mil Std 202 Method 213 test condition 1.
- Vibration: Tested to Lloyds Register Approval Vibration Test 2.
- Moisture resistance: IP66.
- PCB characteristics: UL94V-0.
- Ignition protection: UL 1500 compliant.
- Salt spray: Tested to Lloyds Register Approval Salt Spray Test.
- Operating Temperature: -40°C to 60°C.
- Storage Temperature: -55°C to 85°C.
- Operating Humidity: 0% to 100% (condensing).
- Weight: 2.8 ounces (80g).

## Typical Wiring Diagram

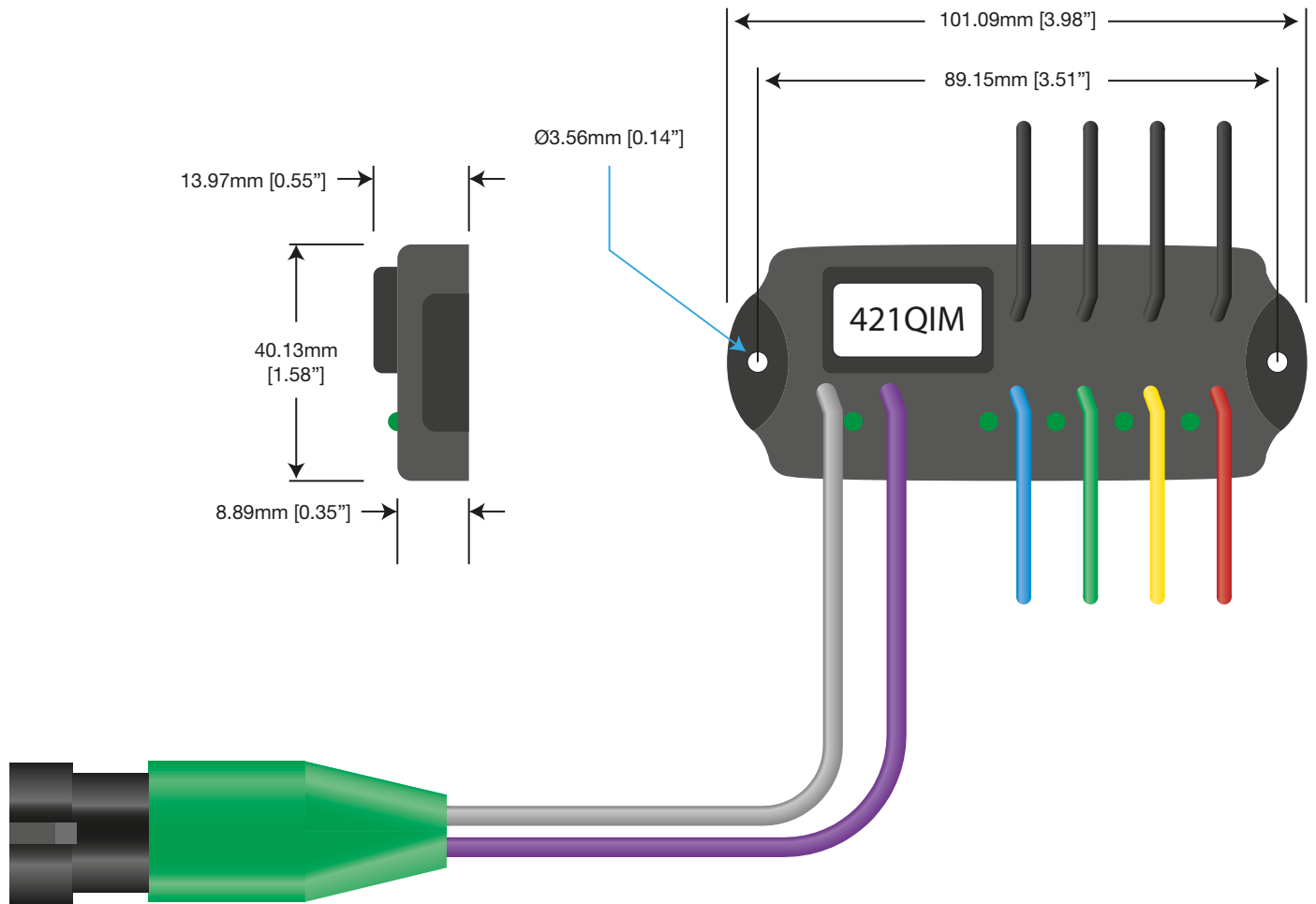
Databus wires (E-Plex+ and E-Plex-) should be tied into the clock module or any additional units on the twisted pair bus. The input wires should be connected to the equipment or switches they are sensing. All returns are common inside the module. A single return may be used for all 4 inputs in the case of a rotary switch. All wire is 16AWG (1.3mm<sup>2</sup>) pre-tinned and stripped 6" (152.4mm) length. All unused wires should be cut and capped.



## Wiring Specifications

Pin #	Wire Color	Pin Description	Operating Voltage	Operating Current
1	Blue	Digital Input 1	0 to 32 VDC	0 mA to 5 mA
2	Green	Digital Input 2	0 to 32 VDC	0 mA to 5 mA
3	Yellow	Digital Input 3	0 to 32 VDC	0 mA to 5 mA
4	Red	Digital Input 4	0 to 32 VDC	0 mA to 5 mA
5	Black	Return	0 VDC	0 mA to 5 mA
6	Black	Return	0 VDC	0 mA to 5 mA
7	Black	Return	0 VDC	0 mA to 5 mA
8	Black	Return	0 VDC	0 mA to 5 mA

## Dimensional Diagram



## Mounting Specifications

Screw assembly to a flat mounting surface using two preformed holes as below.

Metric fasteners: Use M3 size screw, M3 split lock washer and M3 washer. Torque to 90~113 N-cm. Do not exceed this torque as it could cause damage to the electronics.

Imperial (English) fasteners: Use #6 size screw, #6 split lock washer, #6 washer. Torque to 8~10 in-lb. Do not exceed this torque as it could cause damage to the electronics.

## Ordering codes

Description	Old Code	New Code
421QIM Series - Hexa Multi Module, Diode Protected	EP3-SW-IN-4CH-421QIM	EP3-421QIM

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