



IDRATEK

INTELLIGENT AUTOMATION

DIO-002

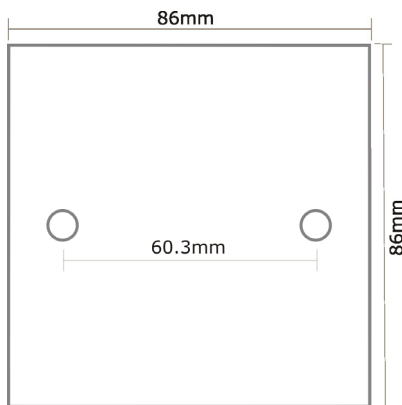
4 Way General Purpose Digital Input/Output



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The DIO-002 module provides a basic digital input/output interface to the IDRANet system. It is intended as a low cost expansion base for creating add-on custom digital input and output interfaces and as such only provides low level unbuffered digital output signals and non-isolated inputs. Output signals feature advanced static and dynamic operation functions. All inputs are Reflex capable and feature pulse counting capability suitable for interfacing to pulse output devices such as utility meters and anemometers.



Physical

- 4 x digital outputs (**unbuffered, non-isolated**)
(Note: Logic 1 = 0V, Logic 0 = 3.3V@1mA)
- 4 x Digital Inputs (**filtered, non-isolated**)

Functional

- All input and output states can be interrogated at any time
- Highly flexible static output state modification
eg. WRITE/SET/CLEAR/TOGGLE any group or individual
- Module start-up output states are user programmable
- Powerful programmable dynamic output functions include:
 - Single shot: Delay, activity time, post activity state
 - Toggle: Period, duration
 - PWM: Mark, space, duty cycle
- All Inputs can provide independent event triggers with mode programmable trigger gating:
Eg: trigger on High->Low, trigger on Low->High, trigger on either transition, trigger and latch
- Each event trigger can generate a pre-defined response and/or several user programmable responses
- Pulse counting capability on digital inputs
- Module Initialise trigger
- Green status indicator LED
- In-situ reprogrammable firmware

Electrical

- Operating voltage 12-15V DC
- Current consumption 17mA (all I/O active)
- 0V Reference provided
- Current output for Logic 0: 1mA per channel
- Maximum current sink per output 20mA (80mA total)

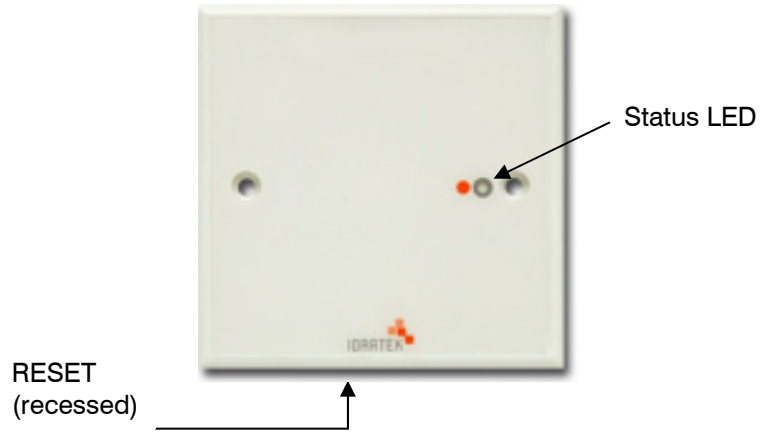
Environmental

- Operating temperature -10°C to +45°C
- Operating humidity 5% to 95% (non-condensing)

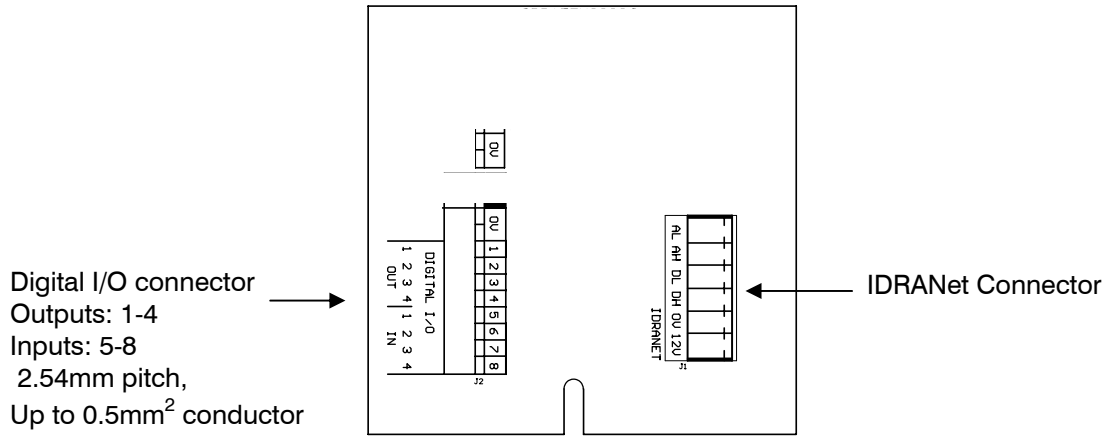
Mechanical

- Designed to fit UK standard 35mm deep electrical pattress
- 60.3mm fixing centres using standard M3.5 screws
- Digital output connections via 2.54mm pitch terminal block, up to 0.5mm² conductor cross section. Four 0V connection points.

Interfaces (front)



Interfaces (rear)



Example Connectivity

