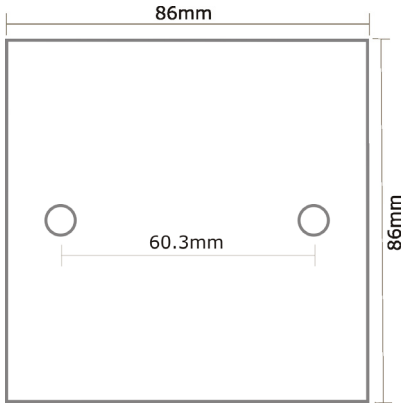
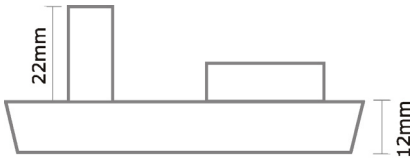
ODO-002
8 Way General Purpose Digital Output

w: www.idratek.com

The ODO-002 module provides a basic digital output interface to the IDRANet system. It is intended as a low cost expansion base for creating add-on custom digital output interfaces and as such only provides a low level unbuffered set of digital output signals. However these output signals retain the advanced static and dynamic operation functions.





Physical

- 8 x digital outputs (**unbuffered, non-isolated**)
  (Note: Logic 1 = 0V, Logic 0 = 3.3V@1mA)
- Maximum current sink per output 20mA (80mA total)
- Maximum source per output 1mA

Functional

- All 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
- Green status indicator LED
- In-situ reprogrammable firmware

Electrical

- Operating voltage 12-15V DC
- Current consumption 17mA (max)
- 0V Reference provided for digital outputs
- Current output for Logic 0: 1mA per channel
- Maximum current sink per output 20mA (80mA total)

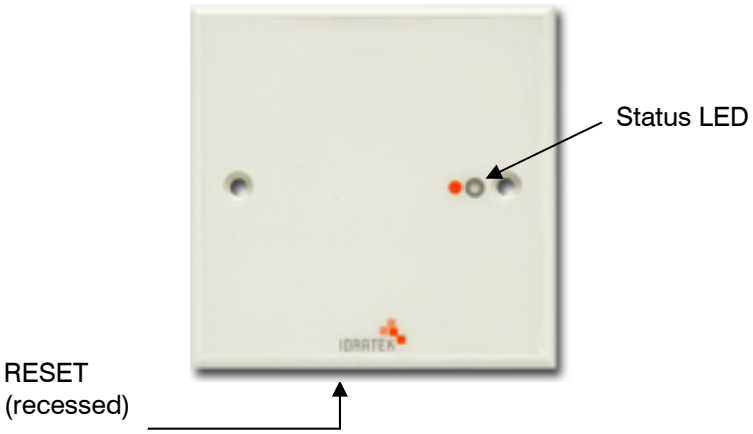
Environmental

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

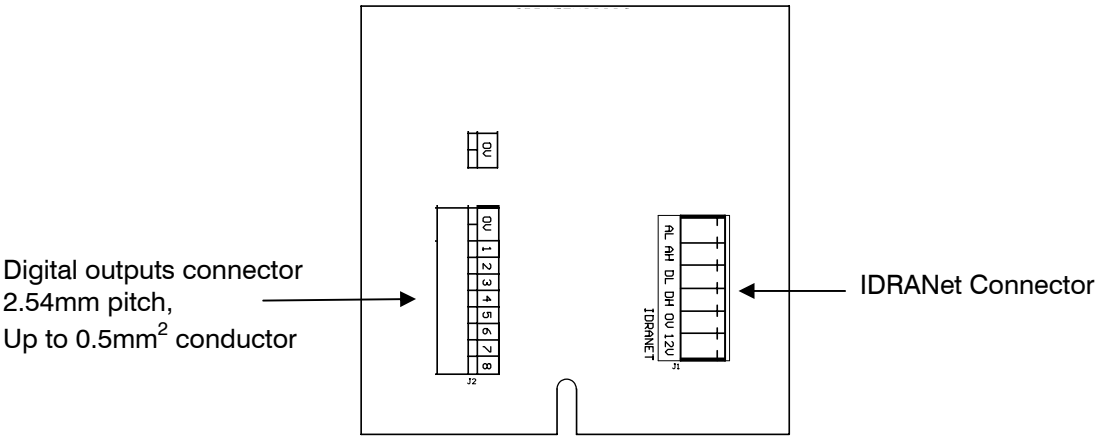
Mechanical

- 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 0.5mm^2 conductor cross section. Four 0V connection points.

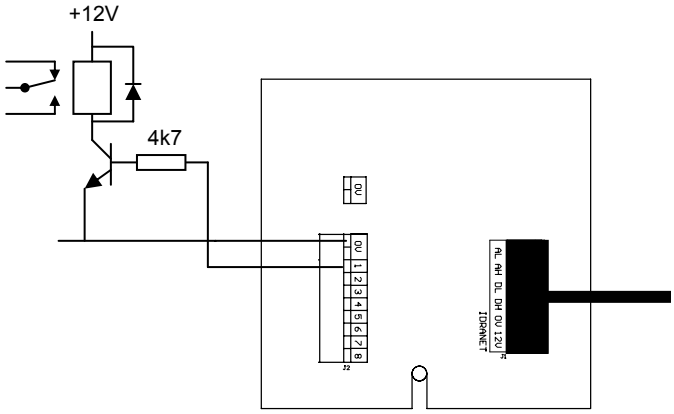
Interfaces (front)



Interfaces (rear)



Example Connectivity



Note: On module power up, despite any user defined initialisation state, outputs will at least momentarily rise to 3.3V. So in this example the relay will be at least briefly energised after a power up. This logic can be inverted, for example, by using two NPN transistors instead of one