



IDRATEK

INTELLIGENT AUTOMATION

SLD-002

1 Channel in-line 250W Light Dimmer



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The SLD-002 is a single channel light dimmer module suitable for use on incandescent lamps and most electronic low voltage transformer based lighting. Certain high voltage halogen lighting (eg. GU10) may also be controlled. The module utilises superior trailing edge (phase turn off) control which avoids high inrush currents and thus improves lamp life expectancy, minimises dimmer noise and allows control of low wattage lamps without flicker. Electronic overload protection is also incorporated. This unit is designed for 'in-line' applications, where separate neutral and lives feeds are not available. It can therefore replace standard 1way light switch fixtures. Availability of onboard user definable ramp and free form dynamic profiles allow complex dynamic scene settings to be accomplished even without a high level control program such as Cortex.



Output Characteristics

- Maximum power: 250W incandescent (Min. 15W)
- Voltage: 200-250V@50Hz AC
- Electronic overload protected
- Inherent soft start
- Dimming range: 0-98% (power linearised)
- Dimming Resolution: 8 bit (0-255)

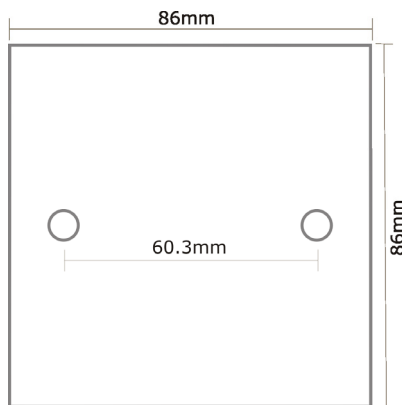
Other Interfaces

- 2 x Click Effect Push Button Input
- 2 x General purpose digital inputs
- 2 x LED Indicator Outputs
- Status indicator LED



Functional

- Static or Dynamic output level can be set via IDRANet (or button) at any time, allowing multiple unit scene setting via Cortex or by any networked input device.
- Local control modes via onboard buttons or digital inputs
- Ramp function with user definable rate
- User definable free form dynamic profiles
 - Profile data retained in non-volatile reprogrammable memory
 - Control over individual step dwell interval
 - Profile lengths up to memory limits
 - Cyclic profiles possible
- User definable initial output value
- Onboard push buttons and digital inputs have full Reflex as well as local function capability
- Module Initialise trigger
- Reprogrammable firmware (via IDRANet)



Electrical

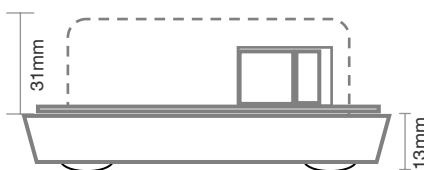
- Operating voltage (IDRANet side) 12-15V DC
- Current consumption (IDRANet side) 20mA
- Lamp side: 230V(nom) @ 50Hz AC, 15W min. - 250W max.

Environmental

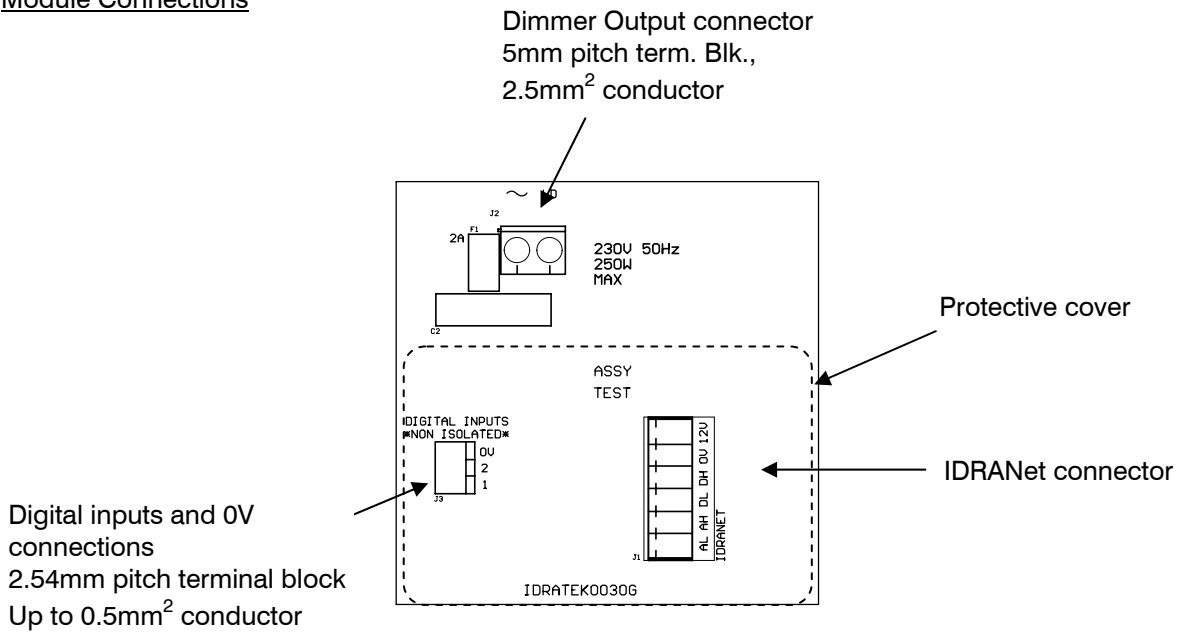
- Operating temperature -10°C to +35°C
- Operating humidity 5% to 90% (non-condensing)

Mechanical

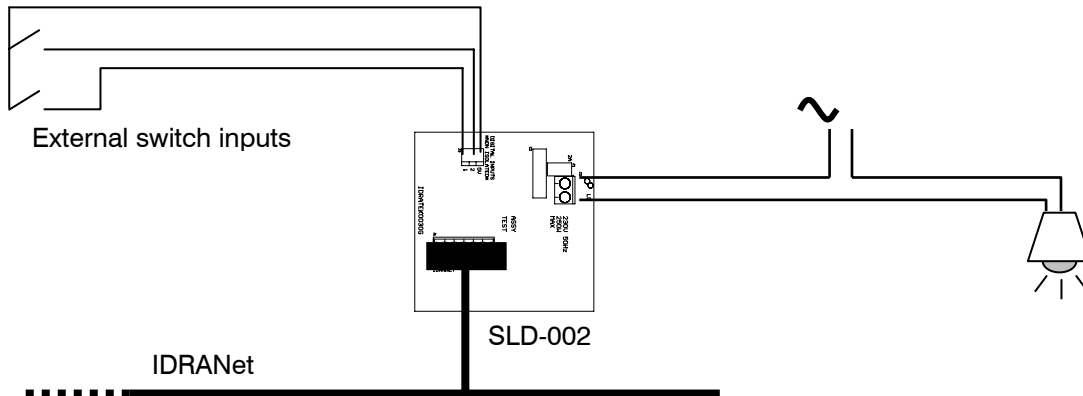
- Designed to fit UK standard 35mm deep electrical pattress
- 60.3mm fixing centres using standard M3.5 screws
- Output connections via 5mm pitch terminal block, up to 2.5mm² conductor cross section.
- Digital input connections via 2.54mm pitch terminal block, up to 0.5mm² conductor cross section.



Module Connections



Example connectivity



Default Button Functionality & LED Indications

For greater convenience this module is programmed with a default button behaviour:

- Button1: quick push/release toggles output ON/OFF, push and hold fades up
- Button2: quick push/release toggles ON/OFF, push and hold fades down
- 'ON' means last Dim level recorded before a quick push/release OFF
- LED1 indicates when output is 'ON' (LED on)
- LEDs 1&2 flash during fade up/down respectively
- LEDs 1&2 alternating flashing indicates bulb failure/mains loss sensed

Note that this behaviour can also be assigned to the digital inputs via suitable Reflex programming. Also the behaviour can be disabled, and/or can operate alongside other usual button functions. Cortex may disable default button behaviour whilst it is in control of the network but will then restore default behaviour upon relinquishing control.