

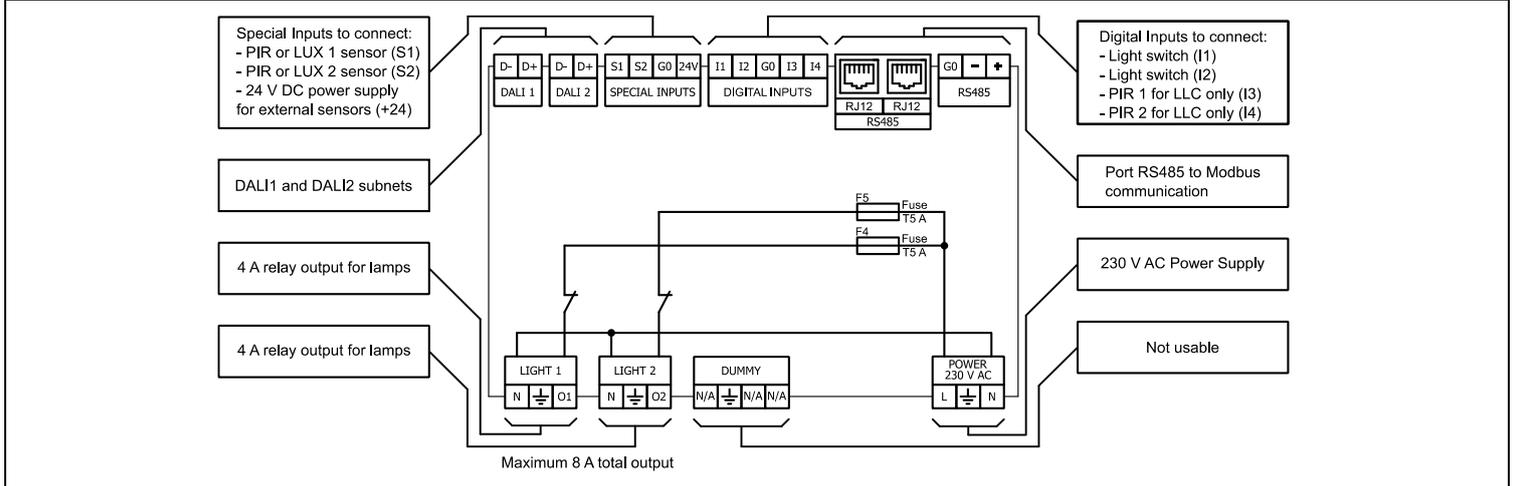
iSMA-B-2D

iSMA-B-2D-WD

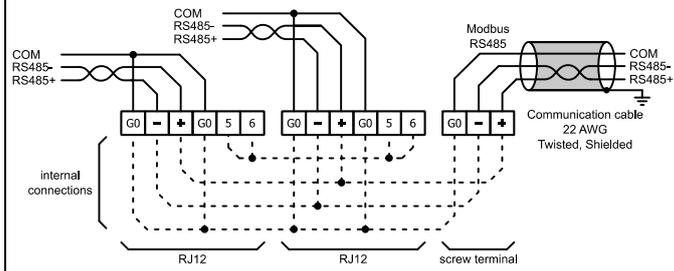


SPECIFICATION	
Power supply	230 V AC
Special inputs	2x dry contact; voltage, current measurement
Digital inputs	4x dry contact input
Digital outputs	2x relay outputs for lights; max. load 4 A @ 230 V AC
Interface	RS485, 2x DALI interfaces (max 16 devices, integrated power supply with 40 mA current limit for each interface), USB
Ingress protection	IP40 - for indoor installation
Temperature	Operating: 0°C to +50°C; Storage -40°C to +85°C
Relative humidity	5 to 95% RH (without condensation)
Connectors	2.5 mm ² screw terminals WD - Plug / Socket Wieland GST15 series
Dimensions	123 x 137 x 55 mm
Mounting	DIN rail mounting (DIN EN 50022 specification)
Housing material	Plastic, self-extinguishing PC/ABS

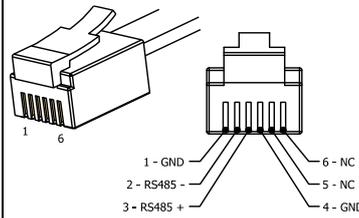
BLOCK DIAGRAM



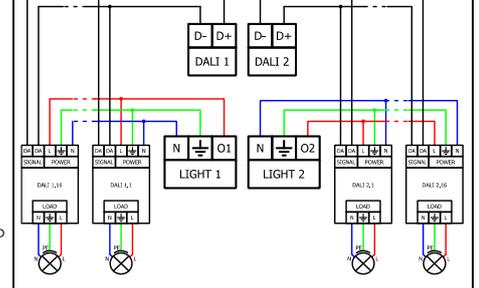
COMMUNICATION



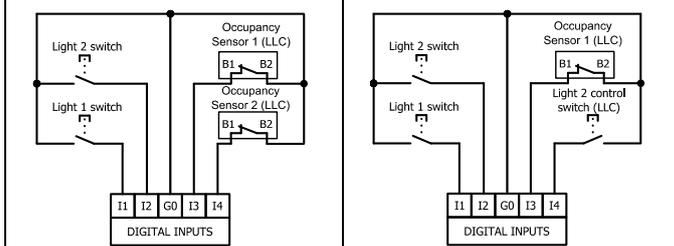
RJ12 PIN DESCRIPTION



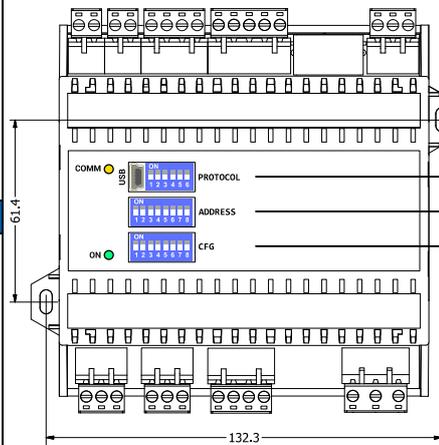
DALI INTERFACE



DIGITAL INPUTS



DIMENSIONS / TOP PANEL

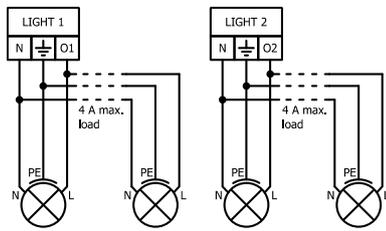


BAUDRATE	PROTOCOL	BIT
1,2,3	4,5	6
000 USER	00 MODBUS RTU	ON = Restore factory defaults
010 4800	01 MODBUS ASCII	
011 9600		
100 19200		
101 38400		
110 57600		
001 76800		
111 115200		

BITWISE ADDRESS CONFIGURATION
E.G. ADDRESS 87 = 01010111

BIT	BIT NAME	CONTROL MODE	CONTROL MODE
BIT1	DH1, DI2 SWITCH TYPE	OFF - MONOSTABLE	ON - BISTABLE
BIT2	DH1 CONTROL MODE	OFF - DALI1 ONLY	ON - DALI1 + DALI2
BIT3	SI1 CONTROL MODE	OFF - DALI1 ONLY	ON - DALI1 + DALI2
BIT4	DI2 CONTROL MODE	OFF - DALI2 ONLY	ON - DALI1 + DALI2
BIT5	SI2 CONTROL MODE	OFF - DALI2 ONLY	ON - DALI1 + DALI2
BIT6	LIGHT CONTROL MODE	OFF - DALI CONTROL	ON - RELAY CONTROL
BIT7	(NOT IN USE)		
BIT8	LIGHT LEVEL CONTROL	OFF - LLC DISABLED	ON - LLC ENABLED

DIGITAL OUTPUTS



WARNING



- Note, an incorrect wiring of this product can damage it and lead to other hazards. Make sure the product has been correctly wired before turning the power ON.
- Before wiring, or removing/mounting the product, be sure to turn the power OFF. Failure to do so might cause electric shock.
- Do not touch electrically charged parts such as the power terminals. Doing so might cause electric shock.
- Do not disassemble the product. Doing so might cause electric shock or faulty operation.
- Use the product within the operating ranges recommended in the specification (temperature, humidity, voltage, shock, mounting direction, atmosphere, etc.). Failure to do so might cause fire or faulty operation.
- Firmly tighten the wires to the terminal. Insufficient tightening of the wires to the terminal might cause fire.



Please read the instruction before use or operating the device. In case of any questions after reading this document, please contact the iSMA CONTROLLI Support Team (support@ismacontrolli.com).



- Before wiring or removing/mounting the product, make sure to turn the power off. Failure to do so might cause an electric shock.
- Improper wiring of the product can damage it and lead to other hazards. Make sure that the product has been correctly wired before turning the power on.
- Do not touch electrically charged parts such as power terminals. Doing so might cause an electric shock.

• Do not disassemble the product. Doing so might cause an electric shock or faulty operation.



- Use the product only within the operating ranges recommended in the specification (temperature, humidity, voltage, shock, mounting direction, atmosphere, etc.). Failure to do so might cause a fire or faulty operation.

- Firmly tighten the wires to the terminal. Failure to do so might cause a fire.

• Avoid installing the product in close proximity to high-power electrical devices and cables, inductive loads, and switching devices. Proximity of such objects may cause an uncontrolled interference, resulting in an instable operation of the product.

• Proper arrangement of the power and signal cabling affects the operation of the entire control system. Avoid laying the power and signal wiring in parallel cable trays. It can cause interferences in monitored and control signals.

• It is recommended to power controllers/modules with AC/DC power suppliers. They provide better and more stable insulation for devices compared to AC/AC transformer systems, which transmit disturbances and transient phenomena like surges and bursts to devices. They also isolate products from inductive phenomena from other transformers and loads.

• Power supply systems for the product should be protected by external devices limiting overvoltage and effects of lightning discharges.

• Avoid powering the product and its controlled/monitored devices, especially high power and inductive loads, from a single power source. Powering devices from a single power source causes a risk of introducing disturbances from the loads to the control devices.

• If an AC/AC transformer is used to supply control devices, it is strongly recommended to use a maximum 100 VA Class 2 transformer to avoid unwanted inductive effects, which are dangerous for devices.

• Long monitoring and control lines may cause loops in connection with the shared power supply, causing disturbances in the operation of devices, including external communication. It is recommended to use galvanic separators.

• To protect signal and communication lines against external electromagnetic interferences, use properly grounded shielded cables and ferrite beads.

• Switching the digital output relays of large (exceeding specification) inductive loads can cause interference pulses to the electronics installed inside the product. Therefore, it is recommended to use external relays/contactors, etc. to switch such loads. The use of controllers with triac outputs also limits similar overvoltage phenomena.

• Many cases of disturbances and overvoltage in control systems are generated by switched, inductive loads supplied by alternating mains voltage (AC 120/230 V). If they do not have appropriate built-in noise reduction circuits, it is recommended to use external circuits such as snubbers, varistors, or protection diodes to limit these effects.



Electrical installation of this product must be done in accordance with national wiring codes and conform to local regulations.