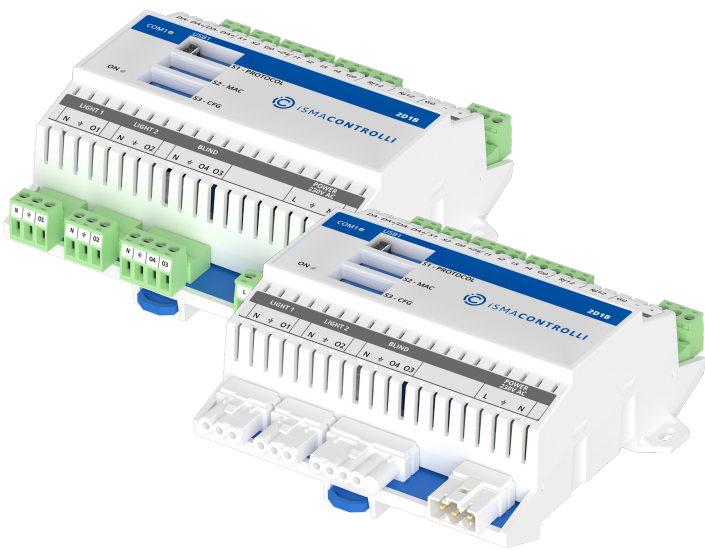


Light and Blind Controller

MODEL	DESCRIPTION
iSMA-B-2D1B	Light and Blind Controller
iSMA-B-2D1B-WD	Light and Blind Controller with Wieland connectors



APPLICATION AND USE

The 2D1B device is designed to control light and blind/shutter motor in a single space in the building. The device is dedicated to control two separate DALI light areas with up to 32 DALI ballasts. Two, built-in special inputs and two digital inputs are dedicated to connect presence detectors and light switches. Dedicated CFG DIP switch allows to activate a predefined inputs configuration. Out of the box, the device allows to control DALI ballasts by a common light switch and presence detector without the need of programming, which makes 2D1B a unique plug&play type device, dedicated to the DALI network control. In addition, 2D1B has a blind/shutter control function implemented, which allows to control a blind/shutter motor by a double-switch. The controller is factory-equipped with the RS485 interface, which is a physical layer for the most popular open communication protocol, Modbus RTU/ASCII.

FEATURES

- 230 V AC power supply
  - Built-in 24 V DC for external equipment
  - Fast processor with ARM core
  - Modbus RTU/ASCII for connecting to higher level system over RS485
  - 2 DALI interfaces: built-in power supply for up to 16 ballasts each
- Dedicated CFG DIP switch for inputs configuration
  - Addressing from 0 to 254 by DIP switch
  - Special and digital inputs for presence detectors and light and blind switches connection
  - 2 power supply outputs for ballasts (fuse-protected)
  - Power supply output for blind motor (fuse-protected)

TECHNICAL SPECIFICATION

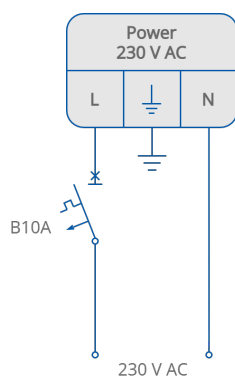
DESCRIPTION		2D1B(-WD)
Power supply	Voltage	230 V AC
	Number of inputs	2
Special inputs	Voltage input	Measurement accuracy: 50 mV Measurement resolution: 6 mV
	Current input	Measurement accuracy: 250 uA Measurement resolution: 30 uA
	Dry contact	Output current ~0.2 mA
	Number of inputs	4
Digital inputs	Type	Dry contact
	Maximum input frequency	100 Hz

The performances stated in this sheet can be modified without any prior notice.

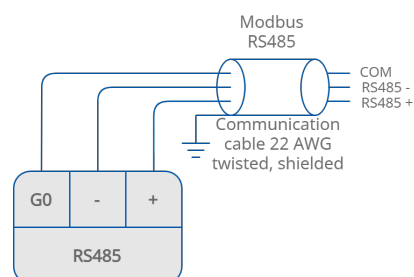
DESCRIPTION		2D1B(-WD)	
Light outputs (relay)	Number of outputs	2	
	Resistive load (AC1)	Max. 4 A at 230 V AC	
Blind output	Number of outputs	1	
	Type	Triac	
	Resistive load (AC1)	Max. 1.5 A at 230 V AC	
Power supply output	Voltage	24 V DC, max. 80 mA	
COM1	RS485 interface	Up to 128 devices	
		Half-duplex	
	Communication protocol	Modbus RTU/ASCII	
	Ports	2 RJ12 ports + screw connector	
	Baud rate	2400-115200	
DALI1	DALI interface	Up to 16 ballasts	
	Built-in power supply	Max. 40 mA	
DALI2	DALI interface	Up to 16 ballasts	
	Built-in power supply	Max. 40 mA	
USB1	mini USB	Type B	
Ingress protection	IP rating	IP 40 for indoor installation	
Temperature	Storage	-40°C to +85°C (-40°F to +185°F)	
	Operating	0°C to +50°C (32°F to 122°F)	
Humidity	Relative	5 to 95% RH (without condensation)	
Screw connectors	Type	Removable screw terminals	
	Maximum cable size	2.5 mm <sup>2</sup> (18...12 AWG)	
Wieldand connectors (optional)	Type	Plug/socket Wieland GST15 series	
Housing	Material	Self-extinguishing plastic (PC/ABS)	
	Mounting	DIN (DIN EN 50022 norm)	
Dimensions		2D1B	2D1B-WD
	Width	123.60 mm/4.87 in	123.60 mm/4.87 in
	Length	136.20 mm/5.36 in	135.80 mm/5.34 in
	Height	54.50 mm/2.15 in	54.50 mm/2.15 in

## WIRING DIAGRAMS

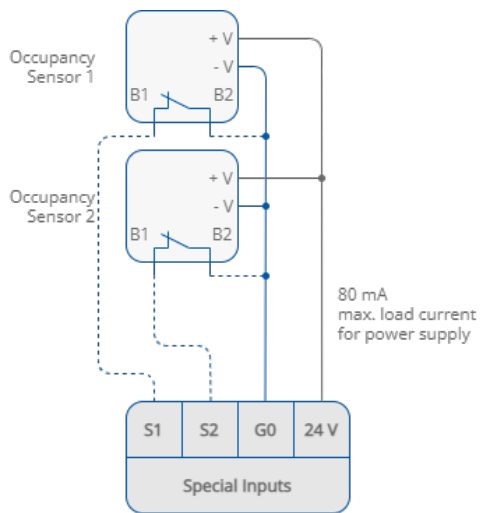
### Power Supply



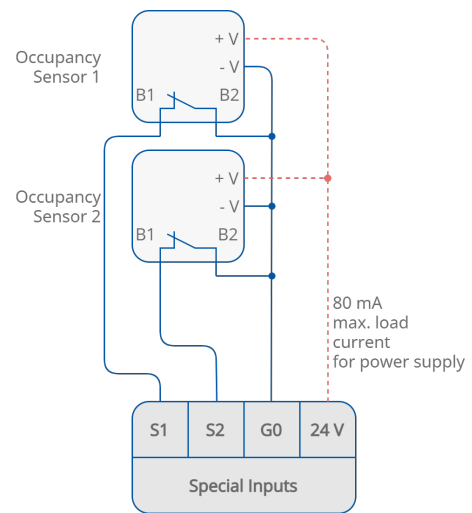
### Communication



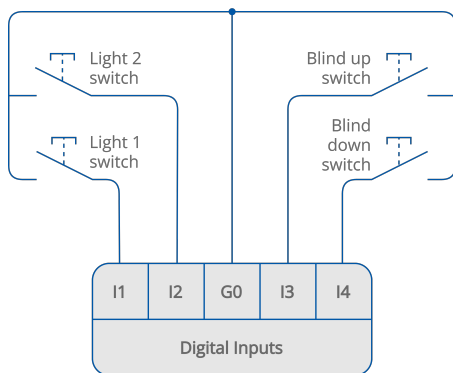
## Special Inputs



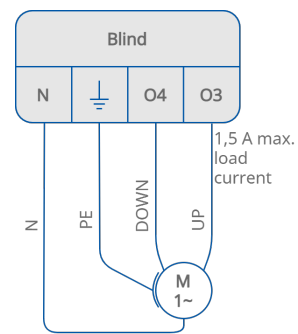
## 24 V DC Power Supply Output



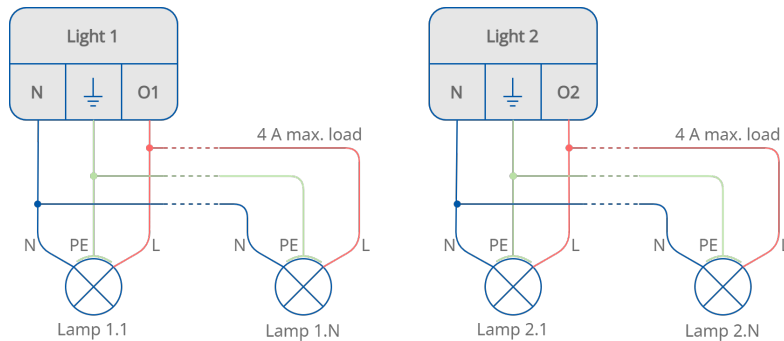
## Digital Inputs



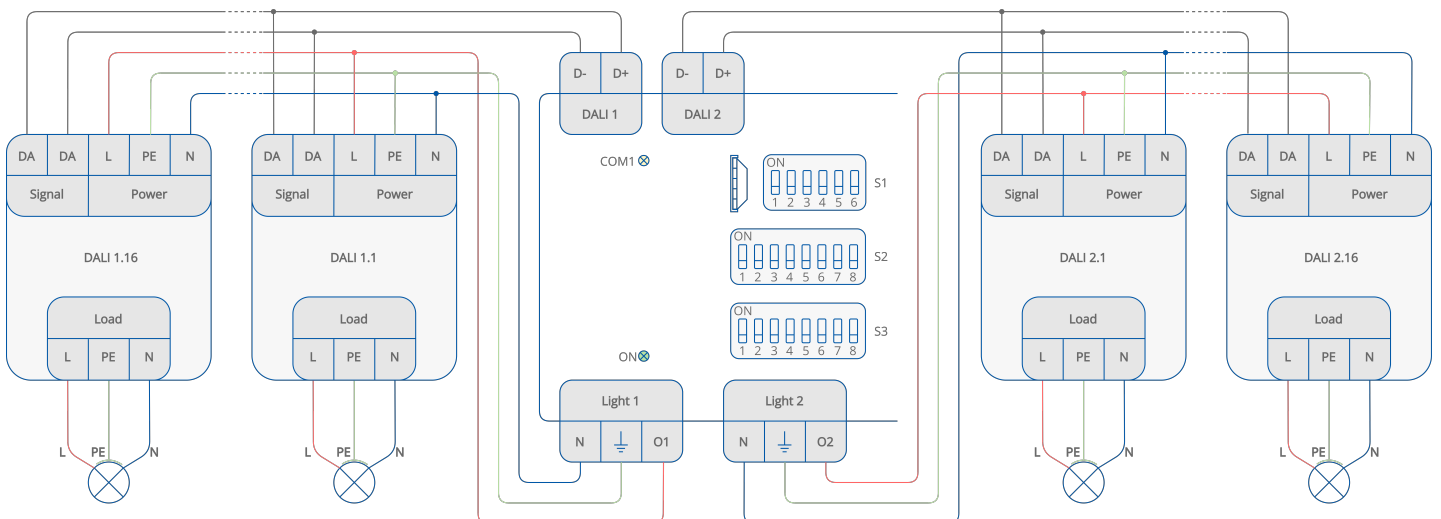
## Blind Output

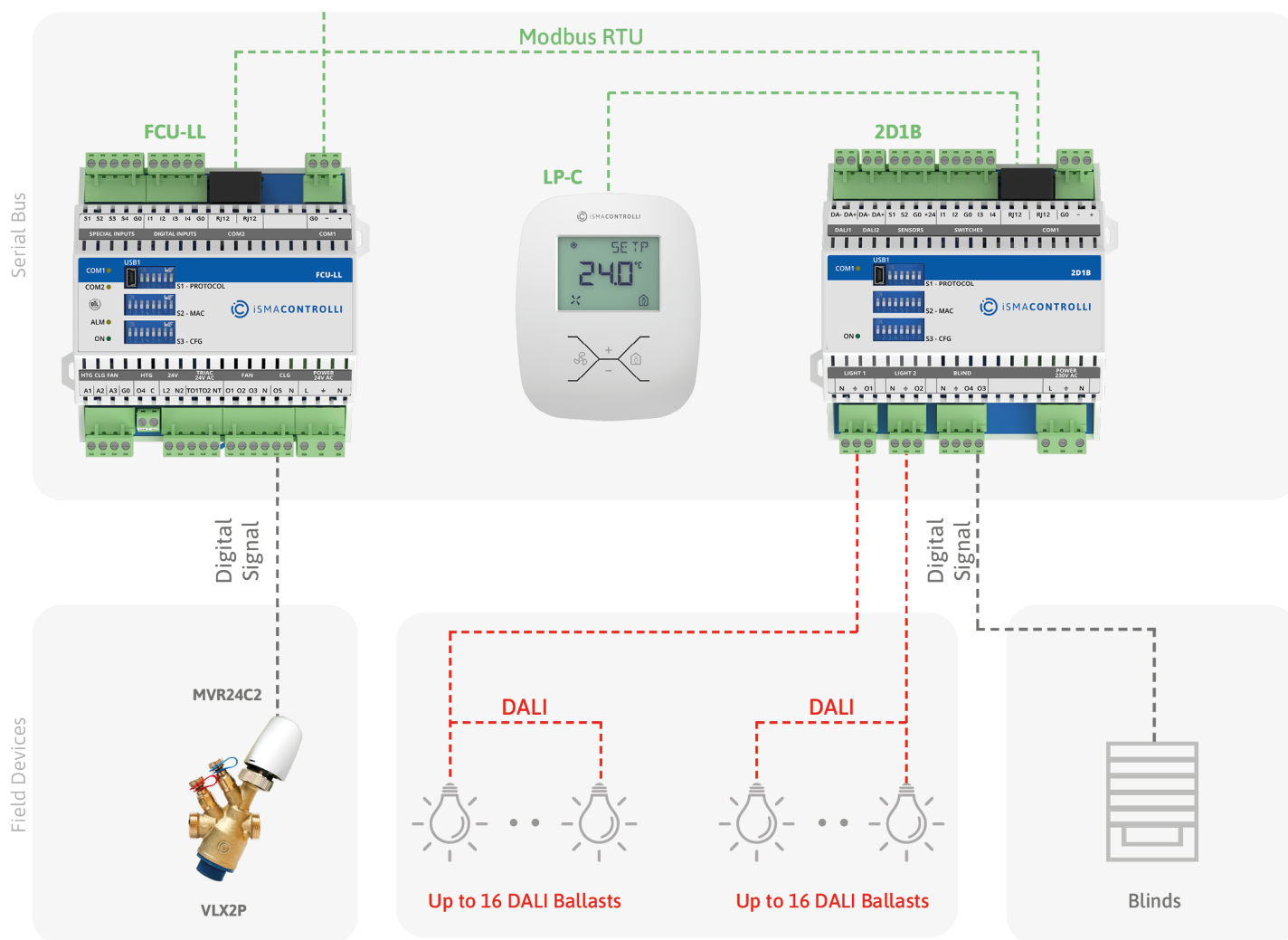


## Light Outputs



## Connection of ballasts and lamps



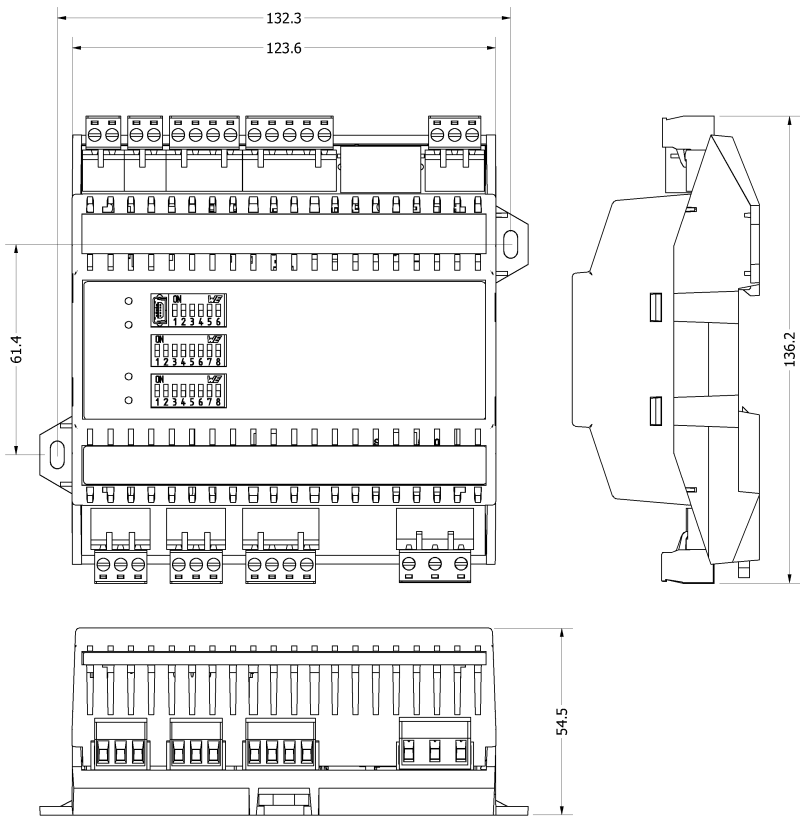


## DEDICATED SOFTWARE



iSMA Configurator - configuration tool for non-programmable iSMA CONTROLLO devices

2D1B



2D1B-WD

