# **Light Controller**

MODEL	DESCRIPTION	
iSMA-B-2D	Light Controller	
iSMA-B-2D-WD	Light Controller with Wieland connectors	



# **APPLICATION AND USE**

The 2D device is designed to control light in a single space in the building. The device is dedicated to control two separate DALI light areas with up to 32 DALI ballasts. It offers a light level control mode, which maintains set light levels in up to two separate zones. Two, built-in special inputs and four digital inputs are dedicated to connect presence detectors, light switches, and light level sensors. Dedicated CFG DIP switch allows to activate a predefined inputs configuration. Out of the box, the device allows to control DALI ballasts by light switch and presence detector, or in the LLC mode, without the need of programming, which makes the 2D a unique plug&play type device, dedicated to the DALI network control. 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**

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

# **TECHNICAL SPECIFICATION**

[	DESCRIPTION	2D(-WD)	
Power supply	Voltage	230 V AC ± 10%	
	Number of inputs	2	
Special inputs	Voltage input	Measurement accuracy: 50 mV Measurement resolution: 6 mV	
special inputs	Current input	Measurement accuracy: 250 uA Measurement resolution: 30 μA	
	Dry contact	Output current ~0.2 mA	
	Number of inputs	4	
Digital inputs	Туре	Dry contact	
	Maximum input frequency	100 Hz	

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

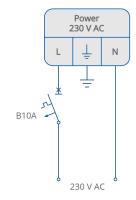




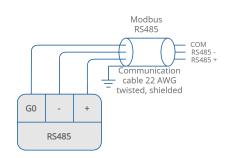
DE	SCRIPTION	2D(-WD)		
Light outputs (relay)	Number of outputs	2		
	Resistive load (AC1)	Max. 4 A a	Max. 4 A at 230 V AC	
Power supply output	Voltage	24 V DC, m	DC, max. 80 mA	
COM1	RS485 interface	Up to 128 devices		
	RS485 Interface	Half-duplex		
	Communication protocol	Modbus RTU/ASCII		
	Ports	2 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	Туре В		
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	Туре	Removable screw terminals		
	Maximum cable size	2.5 mm <sup>2</sup> (1812 AWG)		
Wieldand connectors (optional)	Туре	Plug/socket Wieland GST15 series		
Housing —	Material	Self-extinguishing plastic (PC/ABS)		
	Mounting	DIN (DIN EN 50022 norm)		
		2D	2D-WD	
Dimensions	Width	123.60 mm/4.87 in	123.60 mm/4.87 in	
Dimensions	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**



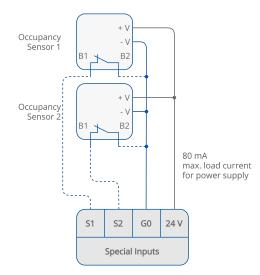
#### Communication



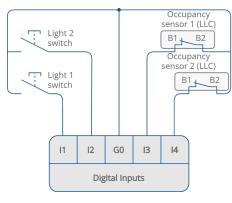


#### **Special Inputs**

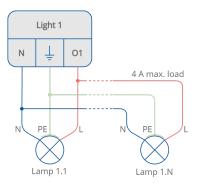
# 24 V DC Power Supply Output

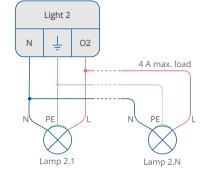


## **Digital Inputs**

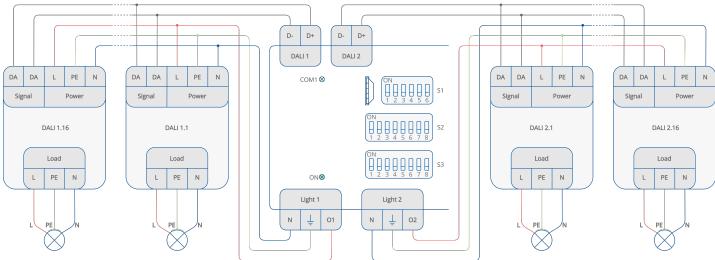


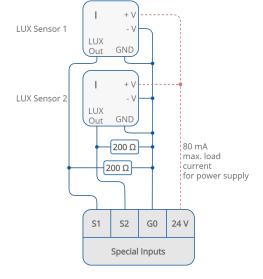
# **Light Outputs**

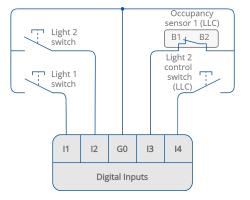




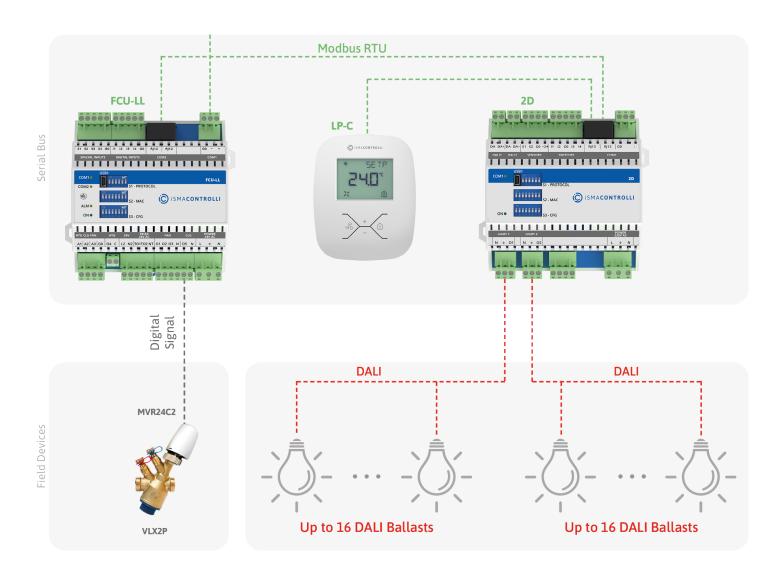
# **Connection of ballasts and lamps**











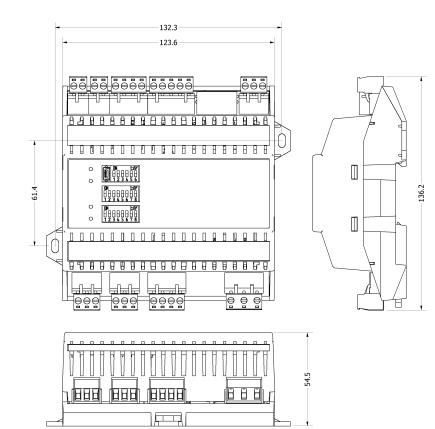
# **DEDICATED SOFTWARE**



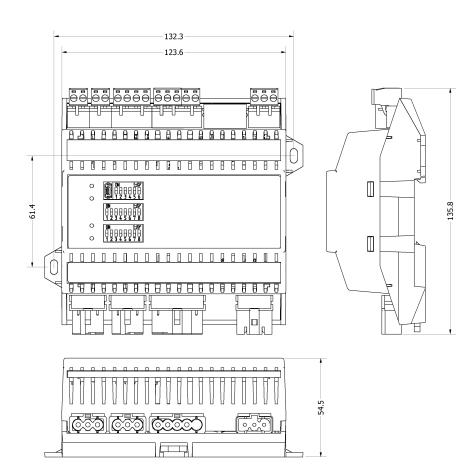
iSMA Configurator - configuration tool for non-programmable iSMA CONTROLLI devices



2D







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