

# DLDBM22

## PoM distribution box with integrated 3,3 VDC power supply

DLDBM22 is a DIN rail mounted Power over Modbus distribution box with 10 RJ45 and 12 RJ12 sockets and internal 3,3 VDC power supply derived from the 24 VDC supply on the RJ45 sockets. It transmits both data and electrical power (Power over Modbus). DLDBM22 is compatible with sensors, sensor controllers, HVAC controllers and fan speed controllers with Modbus RTU on board and suitable for long-distance power and data distribution between connected units. Both power supply and Modbus RTU communication are distributed to the connected devices via a single cable.

### Key features

- 10 RJ45 connectors for Power over Modbus (both Modbus RTU and 24 VDC are distributed via the RJ45 connector)
- 12 RJ12 connectors for Power over Modbus (both Modbus RTU and 3,3 VDC are distributed via the RJ12 connector)
- No software or configuration required
- Easy to connect
- DIN rail mountable
- Power supply green LED indication
- Reliable connection for permanent installations
- Built-in 3,3 VDC power supply module

### Article codes

Article code	Supply voltage	Maximum distributed current at 24 VDC (RJ45 sockets)	Maximum distributed current at 3,3 VDC (RJ12 sockets)
DLDBM22	24 VDC (PoM)	1,5 A	0,3 A

### Technical specifications

Supply voltage	24 VDC (Power over Modbus)		
Output voltage	RJ45 connectors	24 VDC	
	RJ12 connectors	3,3 VDC	
Maximum power consumption	36 W @ 24 VDC / 1 W @ 3,3 VDC		
Average power consumption in normal operation	Depends on connected load		
Imax	IP20		
Ambient conditions	Temperature m	0—60 °C	
	Relative humidity	5—85 % rH, non-condensing	
Enclosure	ABS plastic, colour: grey (RAL7035)		

### Area of use

3,3 VDC power supply and Modbus distribution for Modbus RTU compatible articles (RJ45 – for 24 VDC devices and / or RJ12 – for 3,3 VDC units)

### Standards

- EMC Directive 2014/30/EC
  - EN 61000-6-1:2007 Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments
  - EN 61000-6-3:2007 Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments Amendments A1:2011 and AC:2012 to EN 61000-6-3
- RoHs Directive 2011/65/EC



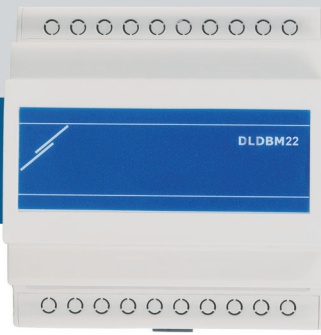
### Wiring and connections

RJ45 sockets	
Pin 1	Supply voltage
Pin 2	Supply voltage
Pin 3	Modbus RTU communication, signal A
Pin 4	Modbus RTU communication, signal A
Pin 5	Modbus RTU communication, signal /B
Pin 6	Modbus RTU communication, signal /B
Pin 7	Ground, supply voltage
Pin 8	Ground, supply voltage
RJ12 sockets	
Pin 1	Supply voltage
Pin 2	Supply voltage
Pin 3	Modbus RTU communication, signal A
Pin 4	Modbus RTU communication, signal /B
Pin 5	Ground, supply voltage
Pin 6	Ground, supply voltage

RJ45 sockets	RJ12 sockets
<p>Diagram showing RJ45 socket wiring: Pin 1 (+24VDC), Pin 2 (+24VDC), Pin 3 (A), Pin 4 (A), Pin 5 (/B), Pin 6 (/B), Pin 7 (GND), Pin 8 (GND).</p>	<p>Diagram showing RJ12 socket wiring: Pin 1 (+3,3VDC), Pin 2 (+3,3VDC), Pin 3 (A), Pin 4 (/B), Pin 5 (GND), Pin 6 (GND).</p>

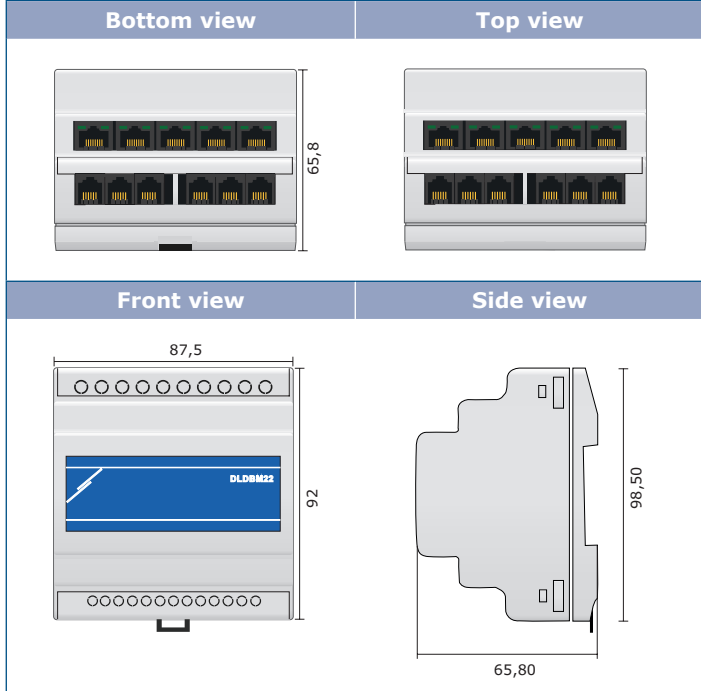
**Attention:** Make sure not to insert an RJ12 connector in an RJ45 socket! This will damage the device that requires 3,3 VDC power supply!



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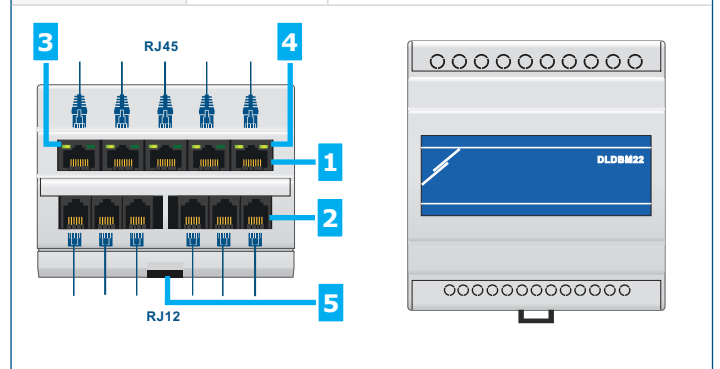
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## Fixing and dimensions

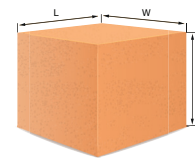


## Settings and indications

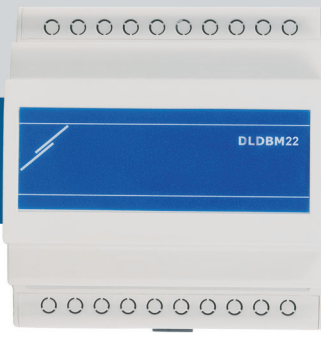
1 - RJ45 socket		Modbus RTU communication and 24 VDC power distribution
2 - RJ12 socket		Modbus RTU communication and 3,3 VDC power supply
3 - Green LED on the left of each socket	On	In normal operation, the left LEDs on all RJ45 sockets should be activated, indicating the presence of 24 VDC power supply via the RJ45 sockets
4 - Green LED on the right of the rightmost socket	On	If there is presence of 3,3 VDC via the RJ12 sockets, the right LED on last right RJ45 socket from bottom and top side should be activated
5 - Locking clip		At the bottom of the device; used to lock it to the DIN rail



## Packaging



Article	Packaging	Length [mm]	Width [mm]	Height [mm]	Net weight	Gross weight
DLDBM22	Unit (1 pc.)	95	90	85	0,175 kg	0,193 kg
	Box (144 pcs.)	590	380	280	6,30 kg	6,95 kg



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## Application example

