



# DMDBM22

## DIN rail mounted Power over Modbus distribution box

DMDBM22 is a DIN rail Modbus distribution box with 10 RJ45 and 12 RJ12 sockets. It transmits both data and electrical power (Power over Modbus). It 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

### Article codes

| Article code | Supply voltage | Maximum distributed current (3,3 VDC and 24 VDC combined) |
|--------------|----------------|---|
| DMDBM22      | 24 VDC (PoM)   | 1,5 A   |

### Technical specifications

|                           |                                     |                           |
|---------------------------|-------------------------------------|---------------------------|
| Power over Modbus voltage | RJ45 connectors                     | 24 VDC                    |
|                           | RJ12 connectors                     | 3,3 VDC                   |
| Maximum load              | 36 W @ 24 VDC / 1 W @ 3,3 VDC       |                           |
| Imax                      | 1,5 A (3,3 VDC and 24 VDC combined) |                           |
| Protection class          | IP20                                |                           |
| Ambient conditions        | Temperature m                       | -30—85 °C                 |
|                           | Relative humidity                   | 5—85 % rH, non-condensing |
| Enclosure                 | ABS plastic, colour: grey (RAL7035) |                           |

### Area of use

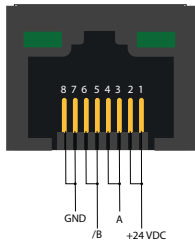
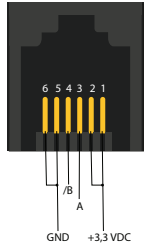
Modbus distribution for Modbus RTU compatible articles (RJ45 – for 24 VDC devices and / or RJ12 – for 3,3 VDC units)

### Standards

- WEEE Directive 2012/19/EC
- RoHS Directive 2011/65/EC



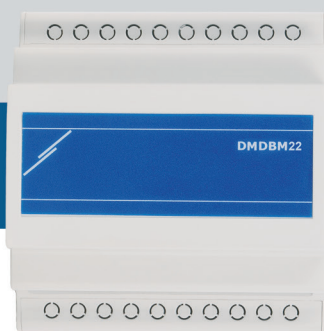
### Wiring and connections

| RJ45 cable  |                                     |
|---|-------------------------------------|
| 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  |                                     |
|  |                                     |

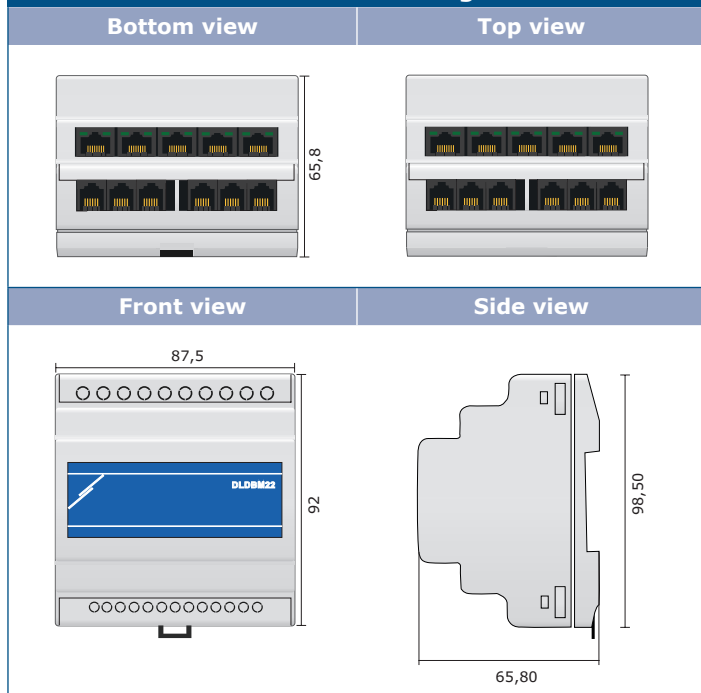
**Attention:** Make sure not to insert an RJ12 connector in an RJ45 socket! This will damage the device that requires 3,3 VDC power supply!

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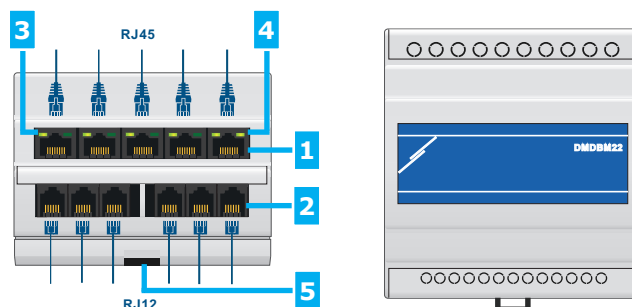


## Fixing and dimensions

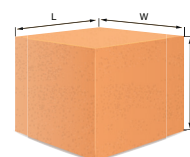


## Settings and indications

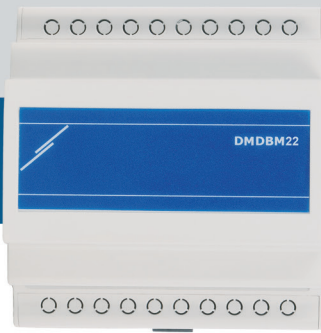
|  |    |  |
|--|----|--|
| 1 - RJ45 socket                                    |    | Modbus RTU communication and 24 VDC power distribution   |
| 2 - RJ12 socket                                    |    | Modbus RTU communication and 3,3 VDC power supply  |
| 3 - Green LED on the left of each socket           | On | In normal operation, the left LEDs on all RJ45 sockets should be activated, indicating the presence of 24 VDC 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          | 0,17 kg    | 0,188 kg     |
|         | Box (144 pcs.) | 590         | 380        | 280         | 6,12 kg    | 6,8 kg       |



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## Application example

