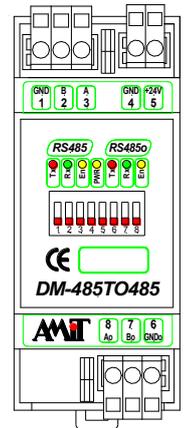


# DM-485TO485

RS485 Communication Line Repeater

- Galvanic isolation with soft excess-voltage protection
- Transmission rate 2.4 kbps to 115 kbps
- Automatic transmission direction switching
- Line status indicated by LED diodes
- 35 mm DIN rail mounting, power supply 24 V DC

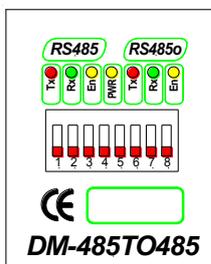


## TECHNICAL DATA

<b>Communication</b>	
Transmission control	Automatic
Transmission rate	2.4 kbps to 115 kbps
Galvanic insulation	Yes *)
Excess-voltage protection	Yes (600 W suppressor diodes)
<b>Power supply</b>	10 V DC to 35 V DC
Power consumption	Max. 100 mA at 24 V DC
<b>Others</b>	
Cover protection rate	IP20
Mounting	35 mm DIN rail
Operating temperature	0 °C to 50 °C
Max. ambient humidity	< 95 % non-condensing
Weight	0.15 kg
Dimensions (w × h × d)	(36 × 91 × 73) mm

\*) Insulation strength 500 V AC / 1 minute, galvanic insulation may not be used for safe and unsafe parts separation.

## SIGNALLING + OPTIONS



- The Tx LED of relevant line is on when the line transmits LOG 0 state
- The Rx LED of relevant line is on when the line receives LOG 0 state
- The En LED of relevant line is on when the line is active
- PWR LED is on when the module is powered by +24 V DC
- The DIP switch for transmission rate setting

## ORDERING INFORMATION

<b>DM-485TO485</b>	RS485 communication line repeater, data sheet, warranty card
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In the idle state, both sides only monitor the status of the lines. As soon as the L level (Start bit) is identified on either line, the level is transferred to the other side. The transmitter remains active for at least the time needed for sending another ten bits (8 data bits + parity bit + stop bit). The monostable circuit is always triggered on an incoming level of 0. The internal wiring guarantees that both transmitters cannot be activated at the same time. Converter power supply and line activity are both indicated by LEDs.

This repeater is not designed for protocols with route-switching delays shorter than the time needed for transmitting one character.

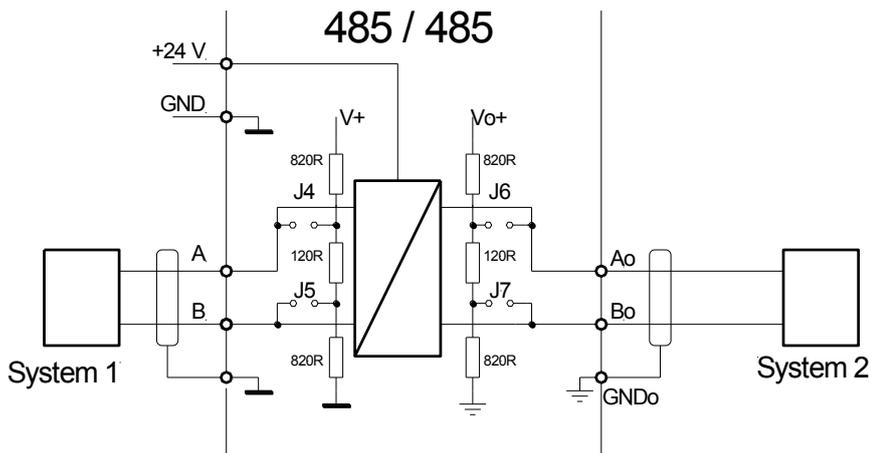
Switched power supply unit that stabilize supply voltage for the **AB** side supplies converter. The **AoBo** side is galvanically isolated and supplied through the DC/DC converter. The **AB** side is galvanically connected to the power supply unit. It is possible to connect line terminating resistors and resistors for idle state definition by jumpers that are available next to the RS485 connectors. Jumpers J4 and J5 are for the AB side. For the AoBo side are jumpers J6 and J7. Both jumpers are always connected at the same time.

Suitable time constant for selected transmission rate is set by DIP switch.

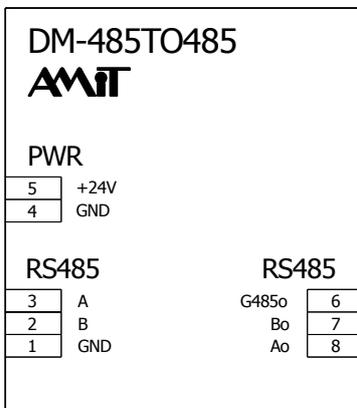
### TRANSMISSION RATE SETTING

Transmission rate [bps]	Switch on jumpers
2400	SW3, SW4, SW7, SW8
4800	SW3, SW7
9600	-
19200	SW2, SW6
38400	SW1, SW2, SW5, SW6

### LINE CONFIGURATION JUMPERS DESCRIPTION



### RECOMMENDED SYMBOL



### CONFIGURATION JUMPERS

