

# **L-Term** (EIA-485)

#### **Features**

- Supports termination of EIA-485 bus systems
- · Applicable for

BACnet MS/TP Modbus RTU (RS-485) TP/RS-485 (CEA-709) CAN, CANopen, DeviceNet

- · Resistance of 120 Ohm
- Screw terminals (0.5 2.5 mm<sup>2</sup>)
- Network access connector RJ-45 (LT-04 only)
- Biasing circuit for failsafe biasing (LT-B4 only)

# **Description**

EIA-485 networks need to be terminated on both ends of the bus using defined network terminators.

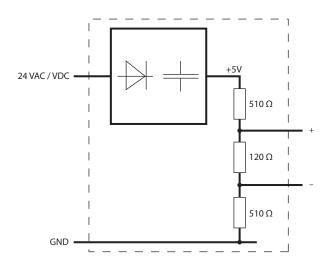
The L-Term **LT-04** and **LT-B4** offer standard network terminators of 120 Ohm to terminate a EIA-485 channel, used for BACnet MS/TP, Modbus RTU over RS-485, and TP/RS-485 (CEA-709) in DIN rail housings.

L-Term **LT-04** is a terminator for EIA-485 channels. In addition, LT-04 comes with a network access connector (RJ45) for a simple and reliable connection to the network e.g. for maintenance or analyzing the network locally.

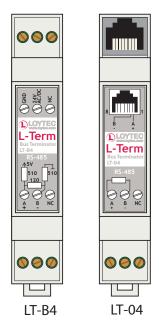
The **LT-B4** is a bus terminator for an EIA-485 channel with biasing circuit (failsafe biasing). This biasing circuit draws the level of the bus during standby mode (idle) to a safe value (logic "1"). The LT-B4 needs a power supply of 24 VAC or 24 VDC.

With bus systems using EIA-485 technology only bus topology is allowed. Therefore, both ends of the cable must have terminators installed. This is necessary to keep up electronic communication.

### Scheme of LT-B4

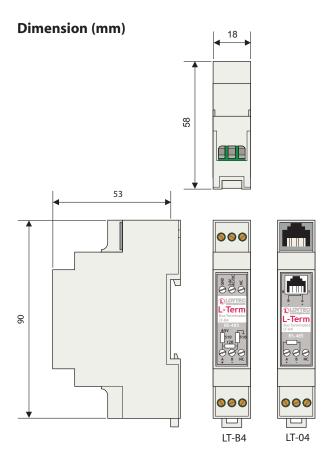


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#### LT-04 Modular Plug RJ-45(8P8C)

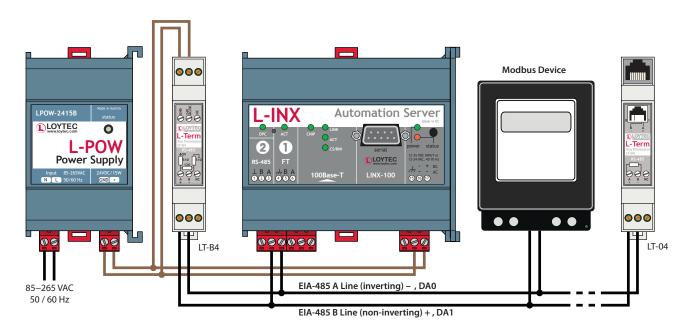
Pin	Marking	Description
1	A +	non-inverting pin, B (EIA-485)
2	B <b>–</b>	inverting pin, A (EIA-485)
3 8	NC	not connected





## **Application Example**

Modbus RTU: LINX-100 Automation Server and terminator LT-B4 with biasing circuit (failsave biasing)



Note: The labeling 'A' and 'B' on the L-Term Terminators differs from EIA-485 channel labeling.

Specifications		
Dimensions (mm)	18 x 90 x 58 (L x W x H)	
Weight	41 g	
Installation	DIN rail mounting (EN 50022)	
Operating temperature	0 °C to 50 °C (ambient)	
Storage temperature	-10 C to 85 °C	
Relative humidity	10-90 % RH @ 50 °C (non condensing)	
Degree of protection IEC 60529	IP 20	
Туре	LT-04	LT-B4
Power supply	-	24 VDC or 24 VAC ±10 %
Power consumption	-	Typ. 175 mW (7.3 mA) @ 24 VDC
Termination Impedance (Z)	120 Ω	
For use with	BACnet MS/TP, Modbus RTU, Modbus ASCII via EIA-485 (RS-485), or LonMark TP/RS485 channel Bus topology, two terminators needed to terminate a bus	

Order Number	Configuration
LT-04	1 x EIA-485 (bus topology), 1 x Network access connector RJ-45
LT-B4	1 x EIA-485 (bus topology), 1 x Power supply for Biasing Circuit (failsafe biasing) 24 VDC/VAC

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