



## UNITRONIC® BUS LD



**Info**

- LD is a LAPP abbreviation for long distance

### Benefits

- Suitable for multiple Bus systems based on RS485 / RS422

### Application range

- For fixed installation  
Maximum electromagnetic screening
- Bus cables for bus systems such as e.g. Modbus, SUCOnet P, Modulink P, VariNet-P)
- Dry or damp rooms

### Product features

- The stated bit rates result in the following cable lengths (maximum) of one bus segment:
  - 9.6-93.75 kbit/s = 1200m
  - 187.5 kbit/s = max. 1,000 m
  - 500 kBit/s = max. 400 m
- Flame-retardant according IEC 60332-1-2

### Norm references / Approvals

- UL variant has approval:  
UL/CSA type CMX acc. to UL 444 and CSA C22.2 no. 214-02

### Product make-up

- Stranded bare 7-wire conductor, colour-coded according to DIN 47100
- Copper braid
- PVC sheath
- Colour: violet (RAL 4001)
- UNITRONIC® BUS LD A as UNITRONIC® BUS LD, but with UL/CSA approval

### Technical data

- Mutual capacitance**  
(800 Hz): max. 60 nF/km
- Peak operating voltage**  
(not for power applications) 250 V
- Conductor resistance**  
(loop): max. 186 ohm/km
- Minimum bending radius**  
Fixed installation: 8 x outer diameter
- Test voltage**  
Core/core: 1500 V rms
- Temperature range**  
Fixed installation: -40°C to +80°C  
Flexing: -5°C to +70°C
- Characteristic impedance**  
100 - 120 Ohm

Article number	Article designation	Number of pairs and mm <sup>2</sup> per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
<b>for fixed installation</b>					
2170203	UNITRONIC® BUS LD	1 x 2 x 0,22	5.7	18.0	37
2170204	UNITRONIC® BUS LD	2 x 2 x 0,22	7.1	28.0	45
2170205	UNITRONIC® BUS LD	3 x 2 x 0,22	7.2	37.0	72
<b>For fixed installation - UL/CSA CMX approval</b>					
2170803	UNITRONIC® BUS LD A	1 x 2 x 0,22	5.7	18.0	39

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Modbus is owned by the Modbus-IDA Organisation. SUCOnet P is a registered trademark of the Moeller Group. Modulink P is a registered trademark of Weidmüller GmbH & Co. VariNet is a registered trademark of Pepperl+Fuchs GmbH.

Photographs are not to scale and do not represent detailed images of the respective products.