

## UNITRONIC® BUS PA

PROFIBUS cables for applications in manufacturing and process automation

Process-automation application connecting sensors and actuators - including areas with risks of explosion. Temperature range from -30 °C bis +80 °C

### Info

PA = Process Automation

Variant with UL/CSA CMG



Supplementary automation components from Lapp



Mechanical and plant engineering



Oil-resistant



UV-resistant

### Benefits

FC (Fast Connect) version is oil and UV-resistant

### Application range

Process-automation application for connecting sensors and actuators - including areas with risks of explosion.

Fixed Installation

### Product features

Bit rate = 31.25 kbit/s. Transmission technology RS485 also possible but bit rate is limited to 1.5 Mbit/s

Maximum cable length is dependent on several factors (e.g. supply voltage, current demand).

Technical Data: refer to the overview on "UNITRONIC® Bus Cables"

Flame-retardant according IEC 60332-1-2

Last Update (24.04.2024)

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Product Management [www.lappkabel.de](http://www.lappkabel.de)

You can find the current technical data in the corresponding data sheet.

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## UNITRONIC® BUS PA

### Norm references / Approvals

PROFIBUS® PA is standardised in EN 50170 as PROFIBUS® DP and PROFIBUS® FMS  
Transmission technology for PROFIBUS-PA in accordance with international standard IEC 61158-2  
FC variant with  
UL/CSA certification (CMG / PLTC)

### Product Make-up

UNITRONIC® BUS PA  
Stranded conductor  
Copper braiding  
Outer sheath: PVC, blue, (RAL 5015) intrinsically safe area, black (RAL 9005)  
UNITRONIC® BUS PA FC  
Bare copper wire  
Fast Connect inner sheath  
Cu-Geflecht  
Outer sheath: PVC, blue (RAL 5015), black (RAL 9005)

### Technical Data

Classification ETIM 5:	ETIM 5.0 Class-ID: EC000830 ETIM 5.0 Class-Description: Data cable
Classification ETIM 6:	ETIM 6.0 Class-ID: EC000830 ETIM 6.0 Class-Description: Data cable
Peak operating voltage:	(not for power applications) 250 V
Conductor resistance:	(loop): max. 44 ohm/km
Minimum bending radius:	Fixed installation: 10 x outer diameter
Test voltage:	Core/core: 1500 V rms
Characteristic impedance:	100 ± 20 Ohm
Temperature range:	Fixed installation: -30 °C to +80 °C During installation: -5 °C to +50 °C

### Note

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

Copper price basis: EUR 150/100 kg. 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).

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Armoured

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

Prices are net prices without VAT and surcharges. Sale to business customers only.

UNITRONIC® BUS PA

Article number	Article designation	Number of pairs and cable diameter per conductor in mm	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
Conventional cable makeup					
2170234	UNITRONIC® BUS PA (BU)	1 x 2 x 1.3	8	45	84
2170235	UNITRONIC® BUS PA (BK)	1 x 2 x 1.3	8	45	84
Fast Connect cable makeup - UL/CSA CMG certification					
2170334	UNITRONIC® BUS PA FC (BU)	1 x 2 x 1	8	45.5	103
2170335	UNITRONIC® BUS PA FC (BK)	1 x 2 x 1	8	45.5	103

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