

# DATASHEET

## INFRALAN® Installation Cable U/UTP Cat.6A 500MHz





### Description

The INFRALAN® U/UTP Cat.6A installation cable is designed for transmissions up to 500MHz and complies with Cat.6A. With this cable, transmission rates of up to 10Gbit Ethernet are possible. Due to the small outer diameter of only 6.6 mm, the cable is also suitable for feed-throughs in narrow cable ducts. Thanks to the B2ca standard according to the Construction Products Regulation and its cable structure of 4x2xAWG23/1, the cable can be used in all areas of installation in buildings.

Areas of application:

Primary (Campus)

Secondary (Riser)

Tertiary (Horizontal)

### General data

Cable silicone free	True
UV resistant	No

### Mechanical characteristics

Bending radius (dynamic)	65 mm
Bending radius (static)	65 mm

### Cable construction

Cable structure	U/UTP
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### Cable construction

Category	6A (IEC)
Conductor category	Kl.1 = single wire
Conductor material	Cu, blank
AWG-size/quantity of cores	23/1
Diameter conductor	0.57 mm
Nominal cross section conductor	0.26 mm <sup>2</sup>
Screen over stranding	without
Stranding element	pairs
Screen over stranding element	without
Core insulation	cellular PE
Core identification	colour

### Cable sheath

Material outer sheath	LSZH
Euro class	B2ca
Flame retardant	According to IEC/EN 60332-1-2;According to IEC/EN 60332-3-24
Halogen free	acc. EN 60754-1/2
Low smoke	acc. EN 61034-2

### Environmental conditions

Operating temperature, flexible	0 – 60 °C
Operating temperature, fix	-15 – 75 °C
Operating temperature, storage	-15 – 75 °C

### Electrical characteristics

PoE	acc. to IEEE 802.3at;acc. to IEEE 802.3af;yes;PoE+;UPoE
NVP value	68.2 %
Loop resistance	164 Ohm/km
Resistance unbalance	≤ 5 %
Insulation resistance (500V)	≥ 5000 MOhm/km
Test voltage DC, 1 min	500 V
Capacity to earth	330 pF/km
Separation class acc. EN50174-2	C
Coupling attenuation	≥ 50 dB
Max. Frequency	500 MHz

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### Standards, approvals, certifications

Cabling standards	EN 50173-1;ISO/IEC 11801
Installation standard	EN 50174
Harmonised Standard	EN 50575
Directive/Regulation	RoHS 2011/65/UE;REACH 1907/2006/EC
Transmission standards	IEEE 802.3 10Mbit to 10Gbit
Cable	IEC 61156-5

### Available variants

Article no.	Title	Length	Colour outer sheath	RAL colour	Number of cores	Type	Outer diameter approx.	Weight	Max. tractive force	Fire load
99965.305-CPR	INFRALAN® Cat.6A 500 AWG23, U/UTP 4P CPR B2ca, RAL5015 blue, 305m	305 m	blue	RAL5015	8	simplex	6.6 mm	50 kg/km	110 N	0.7812 MJ/m
99965.500-CPR	INFRALAN® Cat.6A 500 AWG23, U/UTP 4P CPR B2ca, RAL5015 blue, 305m	500 m	blue	RAL5015	8	simplex	6.6 mm	50 kg/km	110 N	0.7812 MJ/m

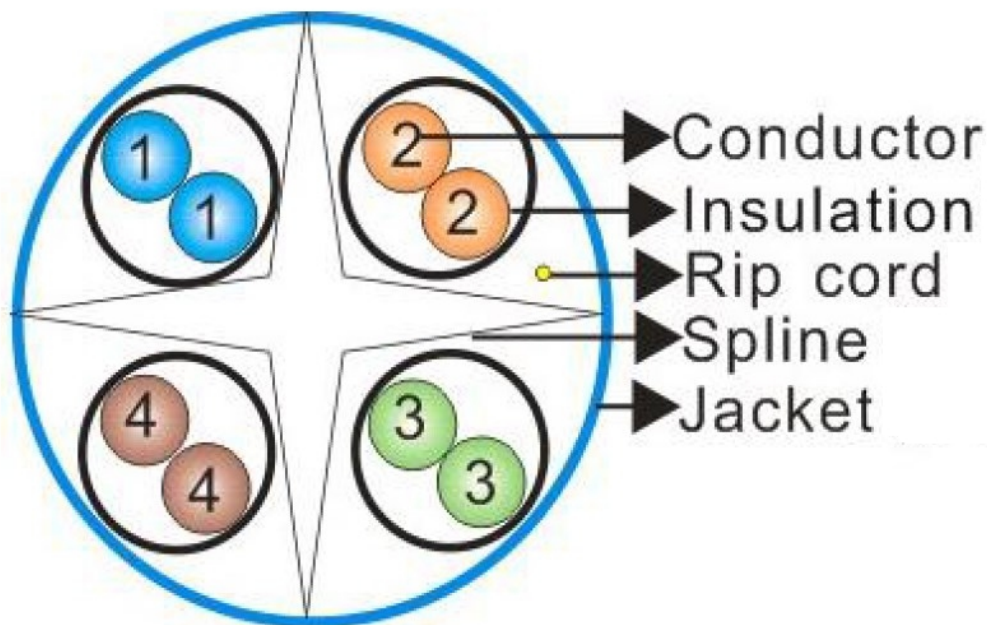
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## INFRALAN® Installation Cable U/UTP Cat.6A 500MHz

### Technical drawings



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## INFRALAN® Installation Cable U/UTP Cat.6A 500MHz

### Technical drawings

### Electrical Characteristics

MHz	ATT	NEXT	RL	PS- NEXT	ELFEXT	PSELFEXT
	dB/100m	dB	dB	dB	dB	dB
	Max.	Min.	Min.	Min.	Min.	Min.
1	2.1	74.3	20.0	72.3	67.8	64.8
4	3.8	65.3	23.0	63.3	55.8	52.8
8	5.3	60.8	24.5	58.8	49.7	46.7
10	5.9	59.3	25.0	57.3	47.8	44.8
16	7.5	56.2	25.0	54.2	43.7	40.7
20	8.4	54.8	25.0	52.8	41.8	38.8
25	9.4	53.3	24.3	51.3	39.8	36.8
31.25	10.5	51.9	23.6	49.9	37.9	34.9
62.5	15.0	47.4	21.5	45.4	31.9	28.9
100	19.1	44.3	20.1	42.3	27.8	24.8
200	27.6	39.8	18.0	37.8	21.8	18.8
250	31.1	38.3	17.3	36.3	19.8	16.8
300	34.3	37.1	16.8	35.1	18.3	15.3
400	40.1	35.3	15.9	33.3	15.8	12.8
500	45.3	33.8	15.2	31.8	13.8	10.8

### accessory

K8109GR.5	RJ45 Patch cable U/UTP, Cat.6A, LSZH, Premium, 500MHz, grey
37589.1	ECOLAN® Distribution Panel 19" 1U 24-Port shifted

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