
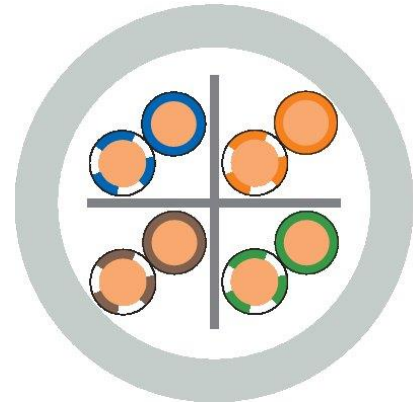


2170954	<b>DATA SHEET</b>	
Valid from: 01.05.2018	<b>ETHERLINE® LAN 350 Cat.6 U/UTP</b>	

## Description

**ETHERLINE® LAN 350 Cat.6 U/UTP** is an installation cable for structured horizontal cabling. These cables are ideal for LAN data transmission in all Ethernet (IEEE 802.3) applications up to 1000 Base-T. IEC 61156-5/ISO/IEC 11801, EN 50173-1, EIA/TIA 568C.2



## General characteristics

Conductor	Solid bare copper wire, AWG 24/1	
Insulation	solid polyethylene	
Core identification code	Pair 1: white/blue – blue	Pair 2: white/orange – orange
	Pair 3: white/green – green	Pair 4: white/brown – brown
Stranding	two cores stranded to pairs, pairs are separated by a central cross element	
Outer sheath	PVC compound outer Ø: approx. 6.0 mm color: grey, similar to RAL 7035	


## Mechanical characteristics

Minimum bending radius	at installation: 4 x cable Ø fixed installation: 8 x cable Ø
Permissible temperature range	at installation: 0 °C up to +50 °C fixed installation: -20 °C up to +60 °C
Flame propagation	flame retardant acc. to IEC 60332-1-2
Classification of fire behaviour acc. to EU Regulation 305/2011 (CPR)	Eca (acc. to EN13501-6 and EN50575)

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### Electrical characteristics

DC-Resistance (loop)	max. 172.0 Ω/km
Insulation resistance	min. 5 GΩ x km
Mutual capacitance	nom. 50 nF/km at 1 kHz
Characteristic impedance	nom. 100 Ω acc. to IEC 61156-5
Operating peak voltage	100 V (not for power purposes)
velocity of propagation	approx. 0.68 c
Test voltage	core/core: 1000 V

### Transmission properties

Transmission properties acc. to IEC 61156-5 for Category Cat.6:

f [MHz]	Attenuation [dB/100m]		PS NEXT [dB]		EL FEXT [dB]		Return Loss [dB]	
	standard	typical	standard	typical	standard	typical	standard	typical
<b>1*</b>	2.1	1.8	75	90	68	82	20.0	25
<b>4</b>	3.8	3.5	66	80	56	75	23.0	30
<b>10</b>	6.0	5.6	60	75	48	67	25.0	34
<b>16</b>	7.6	7.2	57	70	44	65	25.0	35
<b>31,25</b>	10.7	10.1	53	68	38	60	23.6	35
<b>62,5</b>	15.5	14.4	48	62	32	53	21.5	33
<b>100</b>	19.9	18.4	45	60	28	50	20.1	30
<b>250</b>	33.0	29.1	39	57	20	44	17.3	25
<b>300</b>	-	34.8	-	53	-	41	-	23
<b>350</b>	-	38.5	-	48	-	39	-	22

\* Extract of normative minimum requirements

### Standard

EU-Directive	Dangerous and forbidden substances acc. to RoHS directive (2011/65/EU) are not allowed to the manufacturing.
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