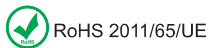


# U/UTP cat. 5e 155 MHz Data transmission cable



## Technical data:

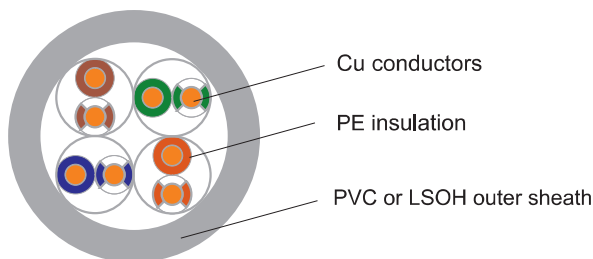
**Temperature range:**  
Operating temperature: -30°C to +70°C  
Installation temperature: -10°C to +50°C  
**Bending radius:** 4xO.D.  
**DC loop resistance at 20°C (max):** 205 Ω/km  
**Insulation resistance (min):** 5GΩ x km  
**Resistance unbalance:** ≤ 2%  
**Capacitance at 1 kHz:** 50 ± 5 nF/km  
**Capacitance unbalance at 1 kHz (max):** 1600 pF/km  
**Nominal voltage:** 150V  
**Test voltage:**  
AC 50 Hz: 700V  
DC: 1000V  
**Characteristic impedance:** 100 ± 5Ω  
**NVP value:** 69%  
**Return loss (min):**  
f = 4 ÷ 10 MHz: 20 + 5lg(f)  
f = 10 ÷ 20 MHz: 25  
f = 20 ÷ 155 MHz: 25 - 7lg(f/20)

## Construction:

**Conductors:** solid round copper conductors  
**Insulation:** special polyolefin compound  
**Core identification:** wh/bu-bu, wh/or-or, wh/gn-gn, wh/bn-bn  
**Core arrangement:** cores twisted in four pairs, pairs twisted together  
**Outer sheath:** PVC or special LSOH compound  
**Outer sheath colour:** grey RAL 7035 for PVC or orange RAL 2003 for LSOH; other colours available on customer's request.

## Application:

BiTLAN U/UTP cat. 5e 155 MHz cables are applicable to computer networks with operating frequency band up to 155 MHz. Suitable for transmission of data, audio and video signals with bitrate up to 1 Gb/s. Dedicated for fixed installations within indoor structured cabling systems as per EN 50173 1:2011, ISO/IEC 11801 2nd ed., ANSI/TIA 568-C.2 standards, as well as within industrial networks not exposed to external electromagnetic interferences. Cables with flame retardant LSOH outer sheath ensuring low smoke emission acc. to EN 50268-2, IEC 61034-2 and limited emission of corrosive gases acc. to EN 50267-2-3 and IEC 60754-2 should be installed in places with increased fire safety requirements.



internal application



EN 60332-1



data transmission

Name	Construction	Outer diameter [mm]	Cu [kg/km]	Cable weight [kg]	Bandwidth [MHz]
U/UTP cat.5e	4P	4,6	14	26	155

# U/UTP cat. 5e 155 MHz Data transmission cable

## Performance test charts and data:

Frequency MHz	1	4	10	16	20	30	45	60	80	100	120	130	155
Attenuation $\leq$ dB/100m	2,1	4,0	6,3	8,0	9,0	11,2	13,9	16,2	18,9	21,3	23,6	24,7	27,2
NEXT $\geq$ dB/100m	65,3	56,3	50,3	47,2	45,8	43,1	40,5	38,6	36,7	35,3	34,1	33,6	32,4
PS NEXT $\geq$ dB/100m	62,3	53,3	47,3	44,2	42,8	40,1	37,5	35,6	33,8	32,3	31,1	30,6	29,5
ELFEXT $\geq$ dB/100m	63,8	51,8	43,8	39,7	37,8	34,3	30,7	28,2	25,7	23,8	22,2	21,5	20,0
PS ELFEXT $\geq$ dB/100m	60,8	48,8	40,8	36,7	34,8	31,3	27,7	25,2	22,7	20,8	19,2	18,5	17,0
RL $\geq$ dB	20,0	23,0	25,0	25,0	25,0	23,8	22,5	21,7	20,8	20,1	19,5	19,3	18,8

