

# BiTLAN U/UTP cat.5e 200 MHz

Data transmission cable



internal  
application



data transmission



EN 60332-1

RoHS 2011/65/EU



LVD 2014/35/EU



CPR 305/2011



## Technical data:

### Temperature range:

Operating temperature: -30°C to +70°C

Min. installation temp: -10°C

**Bending radius:** 4xØ

**Conductor diameter:** 0,5±0,015mm

**Insulated core diameter:** 0,86±0,05mm

**DC loop resistance at 20°C (max):** 190Ω/km

**Insulation resistance (min):** 5GΩxkm

**Resistance unbalance:** ≤2%

**Capacitance at 1 kHz:** 50±5nF/km

**Capacitance unbalance at 1kHz (max):**  
1600pF/km

**Nominal voltage:** 150V

**Test voltage:**

AC 50 Hz: 700V

DC: 1000V

**Characteristic impedance:** 100±5Ω

**NVP value:** 69%

**Return loss (min):**

f = 4÷10MHz: 20+5lg(f)

f = 10÷20MHz: 25

f = 20÷200MHz: 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 pairs, pairs twisted together

**Outer sheath:** special PVC

**Outer sheath colour:** grey RAL 7035 other colours available on customer's request

**Marking:** BITNER BiTLAN U/UTP 4x2x24AWG(0,5) cat.5e 200MHz EN 50173-1  
ISO/IEC 11801 ANSI/TIA 568-C.2 ID no. CE RoHS [www.bitner.com.pl](http://www.bitner.com.pl) meters

## Application:

BiTLAN U/UTP cat. 5e cables are applicable to computer networks with operating frequency band up to 200MHz. 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, ISO/IEC 11801, ANSI/TIA 568-C.2 standards, as well as within industrial networks not exposed to external electromagnetic interferences. Cables classified according to **EN 50575 (CPR)**.

## Packaging:



Box  
(305m)



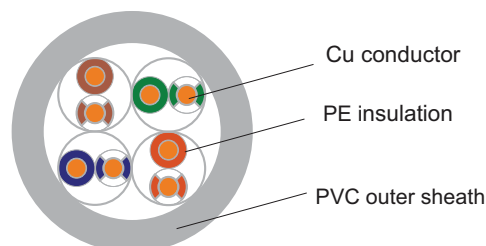
Pallet 10 980m  
(36x305m)



Spool/Coil  
500m



Spool/drum  
1000m



Cat. no	Construction	Cu wire	O.D. [mm]	CPR classification EN 50575	Cu [kg/km]	Cable weight [kg]	Bandwidth [MHz]
TI0006	U/UTP cat.5e	24AWG	4,8	Eca	15	28	200

Cable Factory BITNER reserves the right to modify the specifications without prior notice

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## Performance test charts and data:

Frequency MHz	1	4	10	16	20	30	45	60	80	100	120	130	155	175	200
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	29,2	31,5
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	31,6	30,8
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	28,6	27,8
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	19,0	17,8
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	16,0	14,8
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	18,4	18,0

## Transmission parameters graphs - examples of measurement results

