

BiTLAN® U/UTP cat.5e outdoor

200 MHz

Data transmission cable suitable
for external applications, jelly filled



BITNER BiTLAN U/UTP 4x2x24AWG(0,5) cat. 5e outdoor 200MHz



internal
application



external
application



data transmission



UV resistance



oil resistant
EN 60811-2-1

Technical data:

Thermal parameters:

Temperature range:

operating temperature: -30 °C to 80 °C
min. installation temp: -10 °C

Electrical parameters:

Conductor diameter: $0,5 \pm 0,015$ mm

Insulated core diameter: $0,98 \pm 0,01$ mm

DC loop resistance at 20 °C (max):

190 Ω/km

Insulation resistance (min): 5 GΩ x km

Resistance unbalance within a pair: ≤ 2 %

Mutual capacitance at 1 kHz: 50 ± 5 nF/km

Capacitance unbalance pair to ground

at 1 kHz (max): 1600 pF/km

Nominal voltage: 150 V

Test voltage at 1 min:

AC 50 Hz: 700 V

DC: 1000 V

Characteristic impedance at 100 MHz:

100 ± 5 Ω

NVP value: 67 %

Return loss dB (min):

$f = 4 + 10$ MHz: $20 + 5 \times \log_{10}(f)$

$f = 10 + 20$ MHz: 25

$f = 20 + 200$ MHz: $25 - 7 \times \log_{10}(f/20)$

Mechanical parameters:

Bending radius:

during operation: $\geq 6 \times \varnothing$

during installation: $\geq 8 \times \varnothing$

Design:

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

Filling:

hydrophobic jelly filling

Outer sheath:

polyethylene PE

Outer sheath colour:

black

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

Application:

BiTLAN U/UTP cat.5e outdoor 200MHz 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 1Gb/s. Dedicated for fixed installations within outdoor structured cabling systems as per EN 50173-1, ISO/IEC 11801, ANSI/TIA 568-C.2 standards. Cables are filled with hydrophobic gel preventing water ingress and have UV resistant outer sheath allowing external application as well as direct burial. Cables classified according to **EN 50575 (CPR)**.

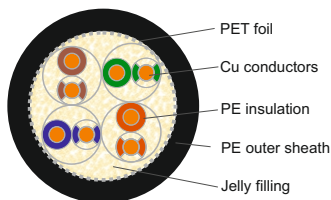
Packaging:



plywood reel
500m



plywood reel/
drum
1000m



Cat. no.	Construction	Cu wire	Outer diameter* [mm]	CPR classification EN 50575	Cable weight [kg]	Bandwidth [MHz]
TI0012	U/UTP cat.5e outdoor	24AWG(0,5)	6,2	Fca	42	200

*Outer diameter tolerance: $\pm 0,5$ %

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

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Requirements of teletransmission data:

Frequency MHz	1	4	10	16	20	30	45	60	80	100	120	130	155	175	200
Attenuation ≤ 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 ≥ dB	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 ≥ dB	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 ≥ 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 ≥ 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 ≥ 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

