

BiTLAN® U/UTP cat.6 350 MHz



Data transmission cable

BITNER BiTLAN U/UTP 4x2x23AWG(0,54) cat. 6 350MHz



internal application



EN 60332-1-2



data transmission

Technical data:

Thermal parameters

Temperature range:

operating temperature: -30°C to +70°C
min. installation temp: -10°C

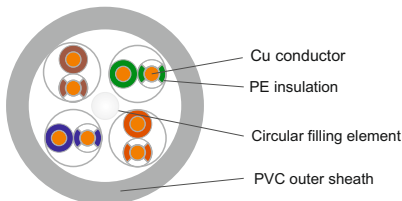
Electrical parameters

Conductor diameter: 0,54±0,015mm
Insulated core diameter: 0,99±0,03mm
DC loop resistance at 20°C (max): 165Ω/km
Insulation resistance (min): 5GΩxkm
Resistance unbalance within a pair: ≤2%
Mutual capacitance at 1 kHz: 50±5nF/km
Capacitance unbalance pair to ground at 1kHz (max): 1600pF/km
Nominal voltage: 150V
Test voltage at 1 min.:
AC: 50 Hz: 700V
DC: 1000V
Characteristic impedance at 100MHz: 100±5Ω
NVP value: 67%
Return loss dB (min):
f = 4÷10MHz: 20+5xlog₁₀(f)
f = 10÷20MHz: 25
f = 20÷350MHz: 25-7xlog₁₀(f/20)

Mechanical parameters

Bending radius:

during operation: ≥ 4xØ
during installation: ≥ 6xØ



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 with a circular filling element

Outer sheath:

special PVC compound

Outer sheath colour:

grey RAL 7035, other colours available on customer's request

Marking: BITNER BiTLAN U/UTP 4x2x23AWG(0,54) cat.6 350MHz 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.6 350MHz cables are applicable to computer networks with operating frequency band up to 350MHz. 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 9150m
(30x305m)



Spool/Coil
500m



Spool/drum
1000m

Cat. no.	Construction	Cu wire	Outer diameter* [mm]	CPR classification EN 50575	Cable weight [kg]	Bandwidth [MHz]
TI0044	U/UTP cat.6	23AWG(0,54)	5,8	Eca	38	350

*Outer diameter tolerance: +/-5%

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

BiTLAN[®] U/UTP cat.6 350 MHz

Data transmission cable

Requirements of teletransmission data:

Frequency MHz	1	4	10	16	20	30	45	60	80	100	120	150	180	200	220	250	280	300	320	350
Attenuation ≤ dB/100m	2,1	3,8	6,0	7,6	8,5	10,5	13,0	15,1	17,7	19,9	22,0	24,8	27,5	29,1	30,7	33,0	35,2	36,6	38,0	40,0
NEXT ≥ dB	66,0	65,3	59,3	56,2	54,8	52,1	49,5	47,6	45,8	44,3	43,1	41,7	40,5	39,8	39,2	38,3	37,6	37,1	36,7	36,1
PS NEXT ≥ dB	64,0	63,3	57,3	54,2	52,8	50,1	47,5	45,6	43,8	42,3	41,1	39,7	38,5	37,8	37,2	36,3	35,6	35,1	34,7	34,1
ELFEXT ≥ dB/100m	66,0	58,0	50,0	45,9	44,0	40,5	36,9	34,5	32,0	30,0	28,4	26,5	24,9	24,0	23,1	22,0	21,0	20,5	19,9	19,1
PS ELFEXT ≥ dB/100m	64,0	55,0	47,0	42,9	41,0	37,5	33,9	31,4	28,9	27,0	25,4	23,5	21,9	21,0	20,1	19,0	18,0	17,5	16,9	16,1
RL ≥ dB	20,0	23,0	25,0	25,0	25,0	23,8	22,5	21,7	20,8	20,1	19,5	18,9	18,3	18,0	17,7	17,3	17,0	16,8	16,6	16,3

Transmission parameters graphs - examples of measurement results

