

BiTLAN U/UTP cat.6 350MHz

Data transmission cable



internal application



EN 60332-1



data transmission



Technical data:

Temperature range:

Operating temperature: -30°C to +70°C

Min. installation temp: -10°C

Bending radius: 4xØ

Conductor diameter: 0,54±0,015mm

Insulated core diameter: 0,975±0,05mm

DC loop resistance at 20°C (max): 165Ω/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: 67%

Return loss (min):

f = 4÷10MHz: 20+5lg(f)

f = 10÷20MHz: 25

f = 20÷350MHz: 25-7lg(f/20)

Construction:

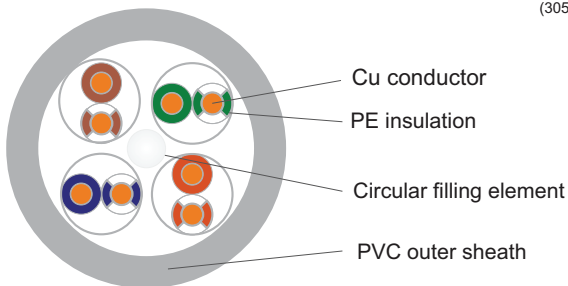
Conductors: solid round copper conductors**Insulation:** special polyolefin compound**Core identification:** wh/bu-bu, wh/or-or,wh/gn-gn, wh/bn-bn**Core arrangement:** cores twisted in pairs, pairs twisted together with a circular filling element**Outer sheath:** special PVC**Outer sheath colour:** grey 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 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
500mSpool/drum
1000m

Cu conductor

PE insulation

Circular filling element

PVC outer sheath

Cat. no	Construction	Cu wire	O.D. [mm]	CPR classification EN 50575	Cu [kg/km]	Cable weight [kg]	Bandwidth [MHz]
TI0044	U/UTP cat.6	23AWG	5,8	Eca	20	38	350

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	150	180	200	220	250	280	300	320	350
Attenuation \leq 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 \geq dB/100m	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 \geq dB/100m	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 \geq 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 \geq 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 \geq 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

