

BiTLAN F/UTP cat.6 350MHz

Data transmission cable, screened



internal
application



EN 60332-1



data transmission

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: 6xØ

Conductor diameter: 0,54±0,015mm

Insulated core diameter: 1,06±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)

Coupling attenuation within the range

of 30 ÷ 100 MHz (min.): 55dB

Transfer impedance at 10 MHz (max):

100mΩ/m.

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 cross spacer

Screen: aluminium backed polyester tape and tinned copper drain wire

Outer sheath: special PVC

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

Marking: BITNER BiTLAN F/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 F/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 1Gb/s. Additional collective Al/Pet screen with CuSn drain wire acts as a protection against external electromagnetic interferences. 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 exposed to external electromagnetic interferences.

Cables classified according to **EN 50575 (CPR)**.

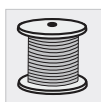
Packaging:



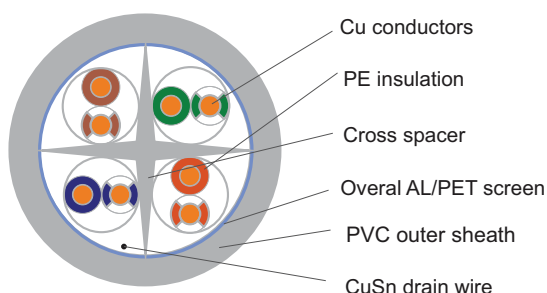
Spool/Coil
305m



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]
TI0048	F/UTP cat.6	23AWG	7,3	Eca	22	50	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

