

BiTLAN F/UTP cat.5e 200 MHz

Data transmission cable, screened

BITNER BiTLAN F/UTP cat.5e



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: 6xØ

Conductor diameter: 0,5±0,015mm

Insulated core diameter: 0,92±0,05mm

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

Insulation resistance (min): 5GΩxkm

Resistance unbalance: ≤2%

Capacitance at 1kHz: 50±5nF/km

Capacitance unbalance at 1kHz (max):

1600pF/km

Nominal voltage: 150V

Test voltage:

AC 50Hz: 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)

Coupling attenuation within the range

of 30÷100 Mhz (min.): 55dB

Transfer impedance at 10Mhz (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

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 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 meters

Application:

BiTLAN F/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 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:



Box
(305m)



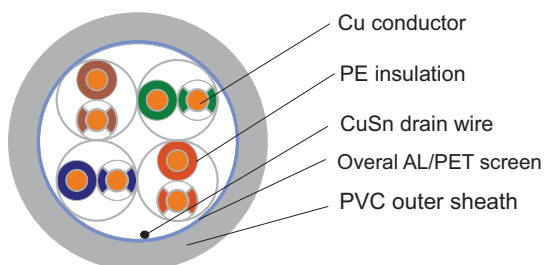
Pallet 9150m
(30x305m)



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]
TI0007	F/UTP cat.5e	24AWG	5,9	Eca	16	37	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

