

BiTLAN F/UTP cat.5e 200 MHz

Data transmission cable, screened

RoHS 2011/65/EU



LVD 2014/35/EU



CPR 305/2011



internal
application



data transmission



EN 60332-1

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)



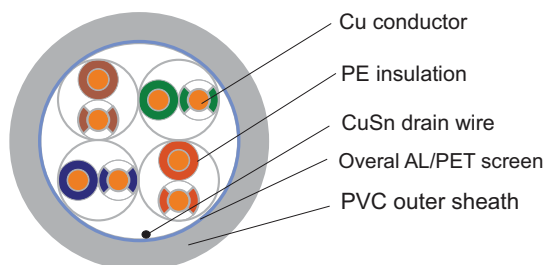
Pallet 9150m
(30x305m)



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

