

BiTLAN[®] F/UTP cat.5e outdoor

200 MHz

Data transmission cable, screened, suitable for external applications



BITNER BiTLAN F/UTP 4x2x24AWG(0,5) cat. 5e outdoor 200MHz



Technical data:

Thermal parameters

Temperature range:

operating temperature: -30°C to +80°C
min. installation temp: -10°C

Electrical parameters

Conductor diameter: 0,5±0,015mm

Insulated core diameter: 0,92±0,03mm

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

Insulation resistance (min): 5GΩxkm

Resistance unbalance within a pair: ≤2%

Mutual capacitance at 1kHz: 50±5nF/km

Capacitance unbalance pair to ground at 1kHz (max): 1600pF/km

Nominal voltage: 150V

Test voltage at 1 min.:

AC 50Hz: 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÷200MHz: 25-7xlog₁₀(f/20)

Coupling attenuation within the range

of 30÷100 MHz (min.): 50dB

Transfer impedance at 10MHz (max):

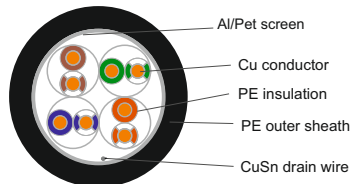
100mΩ/m

Mechanical parameters

Bending radius:

during operation: ≥ 6xØ

during installation: ≥ 8xØ



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

Screen:

Al/Pet screen with tinned copper drain wire

Outer sheath:

polyethylene PE

Outer sheath colour:

black

Marking: BITNER BiTLAN F/UTP 4x2x24AWG(0,5) cat.5e outdoor 200MHz

EN 50173-1 ISO/IEC 11801 ANSI/TIA 568-C.2 ID no. CE RoHS

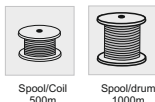
www.bitner.com.pl/meters

Application:

BiTLAN F/UTP cat.5e outdoor 200MHz outdoor 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. Dedicated for fixed installations within outdoor 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. UV resistant outer sheath enables external application.

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

Packaging:



Spool/Coil
500m

Spool/drum
1000m

Cat. no.	Construction	Cu wire	Outer diameter* [mm]	CPR classification EN 50575	Cable weight [kg]	Bandwidth [MHz]
T10051	F/UTP cat.5e outdoor	24AWG(0,5)	6,8	Fca	40	200

*Outer diameter tolerance: +/-5%

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

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Requirements of teletransmission 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	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	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

