

BiTLAN F/UTP cat.5e LSOH

200 MHz

Data transmission cable, screened

BITNER BiTLAN F/UTP cat.5e LSOH



internal application



data transmission



EN 60332-1

halogen-free
EN 60754low smoke emission
EN 61034

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: 0,86±0,05mm

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

Insulation resistance (min): 5GΩxkm

Resistance unbalance: ≤2%

Capacitance at 1 kHz: 50±5nF/km

Capacitance unbalance at 1 kHz (max):

1600pF/km

Nominal voltage: 150V

Test voltage:

AC 50 Hz: 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÷100MHz (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 LSOH compound**Outer sheath colour:** orange RAL 2003

Marking: BITNER BiTLAN F/UTP 4x2x24AWG(0,5) cat.5e 200MHz LSOH
EN 50173-1 ISO/IEC 11801 ANSI/TIA 568-C.2 ID no. CE RoHS
www.bitner.com.pl meters

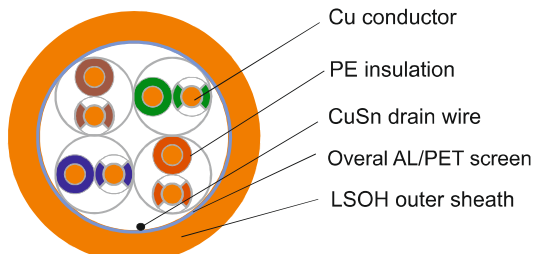
Application:

BiTLAN F/UTP cat. 5e LSOH 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 with flame retardant LSOH outer sheath ensuring low smoke emission acc. to EN 50268-2, IEC 61034-2 and limited emission of corrosive gases acc. to EN 60754-2, IEC 60754-2. should be installed in places with increased fire safety requirements.

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

Packaging:

Box
(305m)Pallet 9150m
(30x305m)Spool/Coil
500mSpool/drum
1000m

Cat. no	Construction	Cu wire	O.D. [mm]	CPR classification EN 50575	Cu [kg/km]	Cable weight [kg]	Bandwidth [MHz]
TI0009	F/UTP cat.5e LSOH	24AWG	5,9	Dca-s2,d0,a1	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

