

# BiTLAN S/FTP cat.6A LSOH

## 500 MHz

Halogen-free, data transmission cable,  
screened



internal  
application



EN 60332-1



data transmission



halogen-free  
EN 60754



low 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: 0,57±0,015mm

Insulated core diameter: 1,3±0,01mm

DC loop resistance at 20°C (max): 145Ω/km

Insulation resistance (min): 5GΩxkm

Resistance unbalance: ≤2%

Capacitance at 1 kHz: 45±5nF/km

Capacitance unbalance at 1kHz (max):

1600pF/km

Nominal voltage: 150V

Test voltage - 1min:

AC 50 Hz: 700V

DC: 1000V

Characteristic impedance: 100±5Ω

NVP value: 77%

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):

50mΩ/m

## Construction:

**Conductors:** solid round copper conductors

**Insulation:** special polyolefin compound, foam-skin

**Core identification:** wh/bu-bu, wh/or-or, wh/gn-gn, wh/bn-bn

**Core arrangement:** cores twisted in pairs, screened pairs twisted together

**Screen 1:** aluminium backed polyester tape on every pair and tinned copper drain wire

**Screen 2:** tinned copper wire braid

**Outer sheath:** special LSOH compound

**Outer sheath colour:** orange RAL 2003

**Marking:** BITNER BiTLAN S/FTP 4x2x23AWG cat.6A 500MHz LSOH

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

www.bitner.com.pl meters

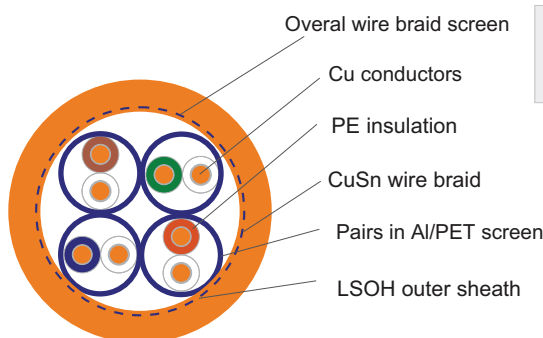
## Application:

BiTLAN S/FTP cat.6A LSOH cables are applicable to computer networks with operating frequency band up to 500MHz. Suitable for transmission of data, audio and video signals, with bitrate up to 10Gb/s. Additional individual and collective Al/Pet screens 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:



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]
TI0081	S/FTP cat.6A LSOH	23AWG	7,5	Dca-s1a,d2,a1	25	60	500

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

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**500 MHz** Halogen-free, data transmission cable, screened

## Performance test charts and data:

Frequency MHz	1	4	10	16	20	31,25	62,5	100	125	155	175	200	250	300	500
Attenuation $\leq$ dB/100m	2,1	3,8	5,9	7,5	8,4	10,5	15,0	19,1	21,5	24,1	25,7	27,6	31,1	34,3	45,3
NEXT $\geq$ dB/100m	75,3	66,3	60,3	57,2	55,8	52,9	48,4	45,3	43,8	42,4	41,7	40,8	39,3	38,1	34,8
PS NEXT $\geq$ dB/100m	72,3	63,3	57,3	54,2	52,8	49,9	45,4	42,3	40,8	39,4	38,7	37,8	36,3	35,1	31,8
ELFEXT $\geq$ dB/100m	68,0	56,0	48,0	43,9	42,0	38,1	32,1	28,0	26,1	24,2	23,1	22,0	20,0	18,5	14,0
PS ELFEXT $\geq$ dB/100m	65,0	53,0	45,0	41,9	39,0	35,1	29,1	25,0	23,1	21,2	20,1	19,0	17,0	15,5	11,0
RL $\geq$ dB	20,0	23,0	25,0	25,0	25,0	23,6	21,5	20,1	19,4	18,8	18,4	18,0	17,3	17,3	17,3

## Transmission parameters graphs - examples of measurement results

