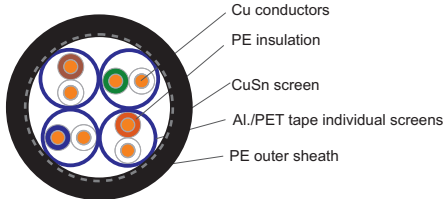
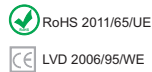
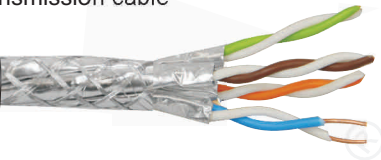


# BiTLAN S/FTP cat.6A PE

## 500 MHz

Data transmission cable

BITNER BiTLAN S/FTP cat.6A PE



### Technical data:

**Temperature range:**  
**operating temperature:** -30°C to +80°C  
**installation temperature:** -10°C to +50°C  
**Bending radius:** 6xO.D.  
**DC loop resistance at 20°C (max):**  
 145 Ω/km  
**Insulation resistance (min):** 5GΩ x km  
**Resistance unbalance:** ≤ 2%  
**Capacitance at 1 kHz:** 45 ± 5 nF/km  
**Capacitance unbalance at 1 kHz (max):**  
 1600 pF/km  
**Nominal voltage:** 150 V  
**Test voltage:**  
 AC 50 Hz: 700V  
 DC: 1000V  
**Characteristic impedance:** 100 ± 5Ω  
**NVP value:** 77%  
**Return loss (min):**  
 f = 4+10 MHz: 20+5lg(f)  
 f = 10+20 MHz: 25  
 f = 20+500 MHz: 25-7lg(f/20)  
**Coupling attenuation for 300+1000 MHz (min.):** 55 dB  
**Transfer impedance for 10MHz (max):**  
 50 mΩ/m

### Construction:

**Conductors:** solid round copper conductors  
**Insulation:** special foam-skin polyolefin compound  
**Core identification:** wh/bu, wh/or, wh/gn, wh/bn  
**Core arrangement:** cores twisted in pairs, pairs twisted together  
**Screen 1:** pairs individually screened with aluminum backed polyester tape  
**Screen 2:** tinned copper wire braid  
**Outer sheath:** special PE (UV)  
**Outer sheath colour:** black

### Application:

BiTLAN S/FTP cat.6A PE outdoor cables are applicable to computer networks with operating frequency band up to 500 MHz. Suitable for transmission of data, audio and video signals with bitrate up to 10 Gb/s. Dedicated for fixed installations within structured cabling systems as per EN 50173-1:2011, ISO/IEC 11801 2<sup>nd</sup> ed., ANSI/TIA 568-C.2 standards, as well as within industrial networks exposed to external electromagnetic interferences. Additional Al./PET and CuSn screen protect against external interferences. Black PE UV resistant outer sheath enables external application and direct burial.



ID	Construction	Cu wire [mm]	O.D. [mm]	Cu [kg/km]	Cable weight [kg]	Bandwidth [MHz]
	S/FTP cat.6A PE	23AWG	8,6	28	63	500

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



# BiTLAN S/FTP cat.6A PE

## 500 MHz

Data transmission cable

### 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

