

BiTLAN® U/UTP cat.6 LSOH

B2ca 350 MHz

LSOH cable for telecommunication and data transmission networks with enhanced fire resistance



BITNER BiTLAN® U/UTP cat.6 350MHz LSOH B2ca



internal application



EN 60332-1-2



data transmission



halogen-free
EN 60754



low smoke emission
EN 61034



CPR class

Technical data:

Thermal parameters:

Temperature range:

operating temperature: -30 °C to 70 °C
during installation: -10 °C to +50 °C
min. installation temp: -10 °C

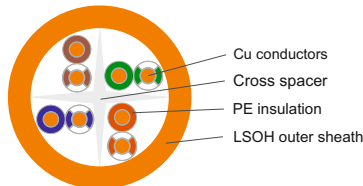
Electrical parameters:

Conductor diameter: 0,54 ± 0,015 mm
Insulated core diameter: 0,985 ± 0,05 mm
DC loop resistance at 20 °C (max):
165 Ω/km
Insulation resistance (min): 5 GΩxkm
Resistance unbalance within a pair: ≤ 2 %
Mutual capacitance at 1 kHz: 50 ± 5 nF/km
Capacitance unbalance pair to ground at 1 kHz (max): 1600 pF/km
Nominal voltage: 150 V
Test voltage at 1 min.:
AC 50 Hz: 700 V
DC: 1000 V
Characteristic impedance at 100 MHz:
100 ± 5 Ω
NVP value: 67 %
Return loss dB (min):
f = 4 + 10 MHz: 20+5xlog₁₀(f)
f = 10 + 20 MHz: 25
f = 20 + 350 MHz: 25-7xlog₁₀(f/20)

Mechanical parameters:

Bending radius:

during operation: ≥ 4xØ
during installation: ≥ 6xØ



Cu conductors
Cross spacer
PE insulation
LSOH outer sheath

Design:

Conductors:

solid round conductors made of soft electrolytic copper

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 with a cross spacer

Outer sheath:

special halogen-free LSOH polymer with enhanced fire performance requirements

Outer sheath colour:

orange RAL 2003, others colours available on customer's request

Marking: BITNER BiTLAN U/UTP 4x2x23AWG(0,54) cat.6 350 MHz LSOH B2ca
EN 50173-1 ISO/IEC 11801 ANSI/TIA 568-C.2 ID no. CE RoHS
www.bitner.com.pl/meters

Application:

BiTLAN U/UTP cat.6 350MHz LSOH B2ca cables are applicable to computer networks with operating frequency band up to 350 MHz. Suitable for transmission of data, audio and video signals with bitrate up to 1Gb/s. 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 not exposed to external electromagnetic interferences. Cables with flame retardant LSOH outer sheath ensuring low smoke emission acc. to EN 50268, IEC 61034-1(2) and limited emission of corrosive gases acc. to EN 50267, IEC 60754-2 should be installed in places with increased fire safety requirements. Cables classified according to **EN 50575 (CPR)**.

Packaging:



plywood reel
500m



plywood reel/
drum
1000m

Cat. no.	Construction	Cu wire	Approximate outer diameter [mm]	Calculated cable weight [kg/km]	Bandwidth [MHz]
Ti0119	U/UTP cat.6 LSOH B2ca	23AWG(0,54)	6,7	52	350

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	150	180	200	220	250	280	300	320	350
Attenuation ≤ dB/100m	2,1	3,8	6,0	7,6	8,5	10,5	13,0	15,1	17,7	19,9	22,0	24,8	27,5	29,1	30,7	33,0	35,2	36,6	38,0	40,0
NEXT ≥ dB	66,0	65,3	59,3	56,2	54,8	52,1	49,5	47,6	45,8	44,3	43,1	41,7	40,5	39,8	39,2	38,3	37,6	37,1	36,7	36,1
PS NEXT ≥ dB	64,0	63,3	57,3	54,2	52,8	50,1	47,5	45,6	43,8	42,3	41,1	39,7	38,5	37,8	37,2	36,3	35,6	35,1	34,7	34,1
ELFEXT ≥ dB/100m	66,0	58,0	50,0	45,9	44,0	40,5	36,9	34,5	32,0	30,0	28,4	26,5	24,9	24,0	23,1	22,0	21,0	20,5	19,9	19,1
PS ELFEXT ≥ dB/100m	64,0	55,0	47,0	42,9	41,0	37,5	33,9	31,4	28,9	27,0	25,4	23,5	21,9	21,0	20,1	19,0	18,0	17,5	16,9	16,1
RL ≥ dB	20,0	23,0	25,0	25,0	25,0	23,8	22,5	21,7	20,8	20,1	19,5	18,9	18,3	18,0	17,7	17,3	17,0	16,8	16,6	16,3

Transmission parameters graphs - examples of measurement results

