

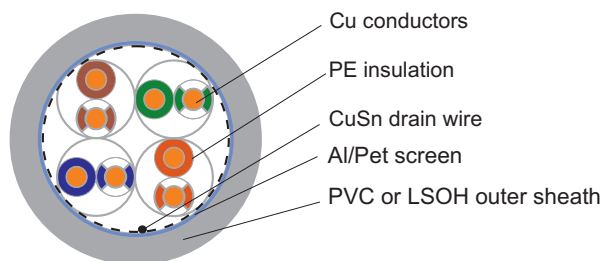
BiTLAN F/UTP cat. 5e 200 MHz

Data transmission cable

BITNER BiTLAN F/UTP cat. 5e

RoHS 2011/65/UE

LVD 2006/95/WE



Technical data:

Temperature range:

Operating temperature: -30°C to +70°C

Installation temperature: -10°C to +50°C

Bending radius: 6xO.D.

DC loop resistance at 20°C (max):

190 Ω/km

Insulation resistance (min): 5GΩ x km

Resistance unbalance: ≤ 2%

Capacitance at 1kHz: 50 ± 5 nF/km

Capacitance unbalance at 1kHz (max):

1600 pF/km

Nominal voltage: 150V

Test voltage:

AC 50 Hz: 700V

DC: 1000V

Characteristic impedance: 100 ± 5Ω

NVP value: 69%

Return loss (min):

f = 4 ÷ 10 MHz: 20 + 5lg(f)

f = 10 ÷ 20 MHz: 25

f = 20 ÷ 200 MHz: 25 - 7lg(f/20)

Coupling attenuation within the range of 30 ÷ 200 Mhz (min.): 50 dB

Transfer impedance at 10 Mhz (max):

100 mΩ/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: Al/Pet screen with tinned copper drain wire

Outer sheath: PVC or special LSOH compound

Outer sheath colour: grey RAL 7035 for PVC or orange RAL 2003 for LSOH; other colours available on customer's request

Application:

BiTLAN F/UTP cat. 5e cables are applicable to computer networks with operating frequency band up to 200 MHz. Suitable for transmission of data, audio and video signals, with bitrate up to 1 Gb/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 50173-1:2011, ISO/IEC 11801 2nd ed., 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 50267-2-3 and IEC 60754-2 should be installed in places with increased fire safety requirements.



internal application



EN 60332-1



data transmission



halogen-free*



low smoke*
emission

*applicable to cables with LSOH outer sheath

ID	Construction	Cu wire	O.D. [mm]	Cu [kg/km]	Cable weight [kg]	Bandwidth [MHz]
TI0007	F/UTP cat.5e	24AWG (0,5)	5,9	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 ≤ 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 ≥ 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 ≥ 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 ≥ 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 ≥ 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 ≥ 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

