

# BiTLAN U/UTPf cat. 5e outdoor

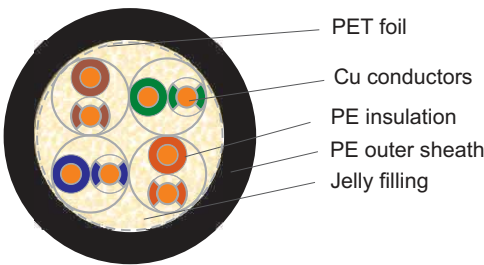
## 200 MHZ

Data transmission cable suitable for external applications

BITNER BiTLAN U/UTPf cat. 5e outdoor



RoHS 2011/65/UE  
LVD 2006/95/WE



### Technical data:

**Operating temperature:**  
Fixed installation: -30°C to +80°C  
Flexible connections: -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 1 kHz:** 50 ± 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:** 67%  
**Return loss (min):**  
f = 4 ÷ 10 MHz: 20 + 5lg(f)  
f = 10 ÷ 20 MHz: 25  
f = 20 ÷ 200 MHz: 25 - 7lg(f/20)

### 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  
**Filling:** hydrophobic jelly filling  
**Outer sheath:** special PE (UV)  
**Outer sheath colour:** black

### Application:

BiTLAN U/UTPf cat. 5e outdoor 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. Cables are filled with gel preventing water ingress. UV resistant outer sheath enables external application and direct burial.



External application



Underground installation



Data transmission



UV resistant

| ID     | Construction          | Cu wire     | O.D. [mm] | Cu [kg/km] | Cable weight [kg] | Bandwidth [MHz] |
|--------|-----------------------|-------------|-----------|------------|-------------------|-----------------|
| TI0012 | U/UTPf cat.5e outdoor | 24AWG (0,5) | 6,2       | 15         | 40                | 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 |

