

**Part Number:** 120452E-LSOH-BLU-305-01  
**Description:** WEBNET Cat 6 U/UTP 4pair Low  
 Smoke Non-Halogen (LSNH) Blue



**Product Construction**

Conductor Material : Bare Copper  
 Insulation Material : High Density Polyethylene (HDPE)  
 Number of Pairs : 4  
 Pair Colours : Blue, Blue/White; Orange, Orange/White,  
 Green, Green/White; Brown, Brown/White  
 Sheath Material : Low Smoke Non-Halogen (LSNH)  
 Sheath Colour : Blue



**Mechanical Characteristics**

Overall Diameter : 5.9mm ± 0.30mm  
 Temperature Range : Fixed -10°C to +60°C Flexing 0°C to +50°C  
 Bend Radius : Fixed 4 x Overall Diameter Flexing 8 x Overall Diameter  
 Weight : 40 kg/km

**Electrical Characteristics**

Max. Conductor DC Resistance : ≤ 9.5 Ω/km @ 20°C  
 Max. Resistance Unbalanced : < 2.5%  
 Max. Insulation Resistance : > 5000 MΩ x m  
 Mutual Capacitance : < 5.6 nF/100m  
 Capacitance Unbalanced : 1600 pF/km  
 Impedance @ 100 MHz : 100 Ω ± 5  
 Velocity of Propagation : 65 %  
 Delay Skew : < 45 ns / 100m  
 Dielectric Strength - DC : 1kV for 1minute

| Frequency (MHz) | Attenuation (dB/100m) | NEXT (dB) | PS - NEXT (dB) | ACRF (dB) | PS-ACRF (dB) | Return Loss (dB) |
|-----------------|-----------------------|-----------|----------------|-----------|--------------|------------------|
| 1               | ≤ 2.0                 | ≥ 74.3    | ≥ 72.3         | ≥ 67.8    | ≥ 64.8       | 20.0             |
| 4               | ≤ 3.8                 | ≥ 65.3    | ≥ 63.3         | ≥ 55.8    | ≥ 52.8       | 23.0             |
| 8               | ≤ 5.3                 | ≥ 60.8    | ≥ 58.8         | ≥ 49.7    | ≥ 46.7       | 24.5             |
| 10              | ≤ 6.0                 | ≥ 59.3    | ≥ 57.3         | ≥ 47.8    | ≥ 44.8       | 25.0             |
| 16              | ≤ 7.6                 | ≥ 56.2    | ≥ 54.2         | ≥ 43.7    | ≥ 40.7       | 25.0             |
| 20              | ≤ 8.5                 | ≥ 54.8    | ≥ 52.8         | ≥ 41.8    | ≥ 38.8       | 25.0             |
| 25              | ≤ 9.5                 | ≥ 53.3    | ≥ 51.3         | ≥ 39.8    | ≥ 36.8       | 24.3             |
| 31.25           | ≤ 10.7                | ≥ 51.9    | ≥ 49.9         | ≥ 37.9    | ≥ 34.9       | 23.6             |
| 62.5            | ≤ 15.4                | ≥ 47.4    | ≥ 45.4         | ≥ 31.9    | ≥ 28.9       | 21.5             |
| 100             | ≤ 19.8                | ≥ 44.3    | ≥ 42.3         | ≥ 27.8    | ≥ 24.8       | 20.1             |
| 200             | ≤ 29.0                | ≥ 39.8    | ≥ 37.8         | ≥ 21.8    | ≥ 18.8       | 18.0             |
| 250             | ≤ 32.8                | ≥ 38.3    | ≥ 36.3         | ≥ 19.8    | ≥ 16.8       | 17.3             |

Performance @ 20°

**Certifications & Standards**

Flame Retardancy : BS EN 60332-1-2 Certification : HDBaseT  
 Low Smoke : BS EN 61034-2 RoHS 3 Compliant : Yes  
 Halogen Gas : BS EN 60754-1&2 REACH Compliant : Yes  
 Manufactured in Accordance to : TIA/EIA 568-C.2, IEC 11801 Class E, EN 50288-6-1, ISO/IEC 61156-5, EN 50173-1  
 UKCA CPR Classification : Eca BS EN 50575:2014+A1:2016



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