

Technical Document
WEBNET Cat 6 4pair U/UTP
External Grade PE Black

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Part Number: 120451F-PE-BLK-01
Description: WEBNET Cat 6 U/UTP 4pair External
Grade PE Black



Product Construction

Conductor Material : Bare Copper, Solid
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 : Polyethylene (PE)
Sheath Colour : Black

Mechanical Characteristics

Overall Diameter : 6.2mm ± 0.30mm
Temperature Range : Fixed -20°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

Certification : HDBaseT
RoHS 3 Compliant : Yes
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 : Fca BS EN 50575:2014+A1:2016

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