

UTP CAT6 COPPER

Feature and Function

- Stable electrical performance, compliant with ANSI/TIA-568-C.2, IEC61156, ISO/IEC11801.
- Compliant with RoHS 2.0.
- Sheath with strong mechanical properties, and high tensile and compressive strength, reducing damage during the project.
- Excellent performance in the Fluke 90-meter permanent link test while working continuously at 50°C high temperature.
- Excellent performance in the Fluke 100-meter channel test while being continuously loaded with 57 V/1 A DC power (PoE).
- Solid-Bare Copper conductor with less resistance, and better electrical properties and transmission performance



Specification

Model	DS-1LN6U-SC0	
Category	Cat.6	
Sheath printing	Washington cables cat 6 plenum bare copper 001..... .1000FT	
Reference standard	ISO/IEC11801, ANSI/TIA-568-C.2, RoHS 2.0	
Fire resistance	Yes	
Conductor	Material	Solid-Bare Copper (99.95%)
	Diameter	0.58 ± 0.005 mm, 23 AWG
Insulation	Material	HDPE
	Diameter	1.03 ± 0.05 mm
Sheath	Thickness	0.65 ± 0.10 mm
	Diameter	6.30 ± 0.30 mm
	Material	PVC
	Color	White
Rip-cord	Yes	
Separator	Yes	
Sheath physical properties	Before aging	Tensile strength ≥ 13.5 Mpa Elongation ≥ 150%
	Aging period	100°C × 24h × 10d
	After aging	Tensile strength ≥ 12.5 Mpa Elongation ≥ 125%
	Cold bend	-20 ± 2°C × 4h, 8 × cable O.D, no visible cracks
Electrical	1.0-250.0 MHz impedance	100 ± 15 Ω @ ≤ 100 MHz 100 ± 25 Ω @ 100-250 MHz
	1.0-250.0 MHz delay skew	≤ 45 ns/100 m
Characteristics (20°C)	DC resistance	≤ 9.38 Ω/100 m
	DC conductor resistance unbalance	≤ 5.0%
	Package dimension	400 mm (W) × 400 mm (H) × 230 mm
	Weight	13.8 ± 0.5kg
	Cable length	(305 ± 1.5) m
	Ambient temperature	-20°C to 75°C (-4°F to 167°F)
	Operating voltage	60 V

Technical Performance (100 m)

Frequency (MHz)	ATT (20 C) ≤ dB	RL ≥ dB	NEXT ≥ dB	PS NEXT ≥ dB	EL FEXT ≥ dB	PS EL FEXT ≥ dB	Phase delay ≤ ns
1	2.0	20.0	74.3	72.3	67.8	64.8	570
4	3.8	23.0	66.3	63.3	56.0	53.0	552
8	5.3	24.5	61.8	58.8	49.9	46.9	547
10	6.0	25.0	60.3	57.3	48.0	45.0	545
16	7.6	25.0	57.2	54.2	43.9	40.9	543
20	8.5	25.0	55.8	52.8	42.0	39.0	542
25	9.5	24.3	54.3	51.3	40.0	37.0	541
31.25	10.7	23.6	52.9	49.9	38.1	35.1	540
62.5	15.4	21.5	48.4	45.4	32.1	29.1	539
100	19.8	20.1	45.3	42.3	28.0	25.0	538
200	29.0	18.0	40.8	37.8	22.0	19.0	537
250	32.8	17.3	39.3	36.3	20.0	17.0	536

