

CAT6 UTP 24 AWG COPPER CABLES

Key Features

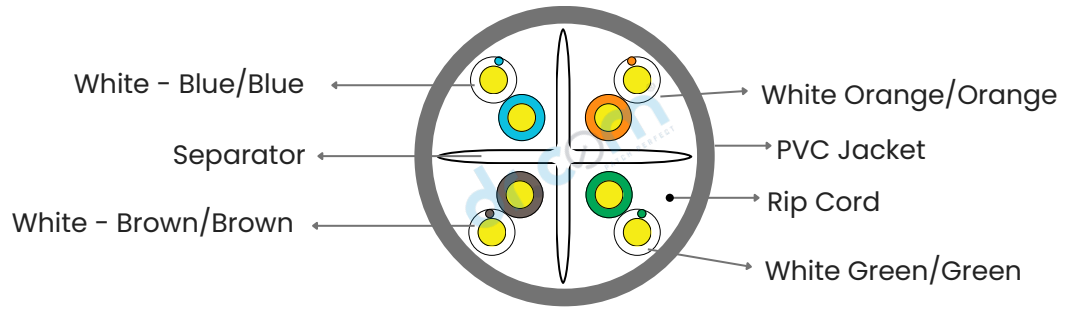
- **Standards Compliant:** Delivers stable electrical performance and complies with ANSI/TIA-568.2-D, IEC 61156, and ISO/IEC 11801 standards.
- **High-Strength Sheath:** Designed with strong mechanical properties and high tensile and compressive strength to help reduce damage during installation and project execution.
- **Fluke 90 m High-Temp Tested:** Demonstrates excellent performance in the Fluke 90-meter permanent link test while operating continuously at temperatures up to 50°C.
- **Fluke 100 m PoE Tested:** Proven reliable performance in the Fluke 100-meter channel test while continuously supporting 57V/1A DC power (PoE).
- **Pure Copper Conductor:** Features solid bare copper conductors with lower resistance, offering improved electrical characteristics and superior transmission performance.



*Images are for representation purpose only.

CAT6 UTP 24 AWG

PVC CABLE

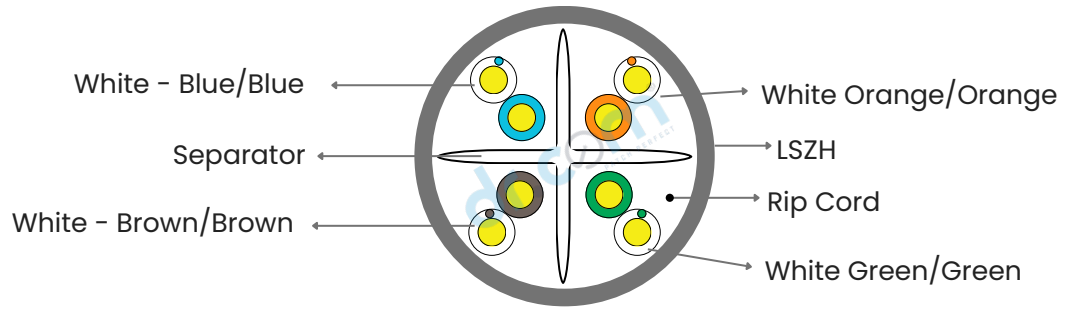


Specification

Model Part No	DR-CAT6_U/UTP-CU24_PV		
Category	CAT 6		
Reference Standard	ISO/IEC11801, ANSI/TIA-568.2-D		
Conductor	Material	Solid-Bare Copper (99.95%)	
	Diameter	24AWG	
Insulation	Material	HDPE	
	Diameter	0.92 ±0.05mm	
Sheath	Thickness	0.50 ± 0.05 mm	
	Diameter	5.8 ± 0.50 mm	
	Material	PVC	
	Color	Grey (* Custom Colors Available)	
Rip-cord	Yes		
Separator	Yes		
Electrical Characteristics (20°C)	1.0-500.0 MHz impedance	100 ± 15 Ω	
	1.0-500.0 MHz delay skew	≤ 45 ns/100 m	
	DC resistance	≤ 9.38 Ω/100 m	
	DC conductor resistance unbalance	≤ 4.0%	
	Ambient temperature	-20°C to 75°C (-4°F to 167°F)	
	Operating voltage	57 V	
Physical Properties	Cable length	305 ± 0.5 m	100 ± 0.5 m
	Package dimension	381 mm (W) × 381 mm (H) × 241 mm (D)	260 mm (W) × 260 mm (H) × 108 mm (D)
	Weight	12 kg Approx	4 kg Approx
	Packing	Coil	Coil
* Custom Lengths Available.			

CAT6 UTP 24 AWG

LSZH CABLE

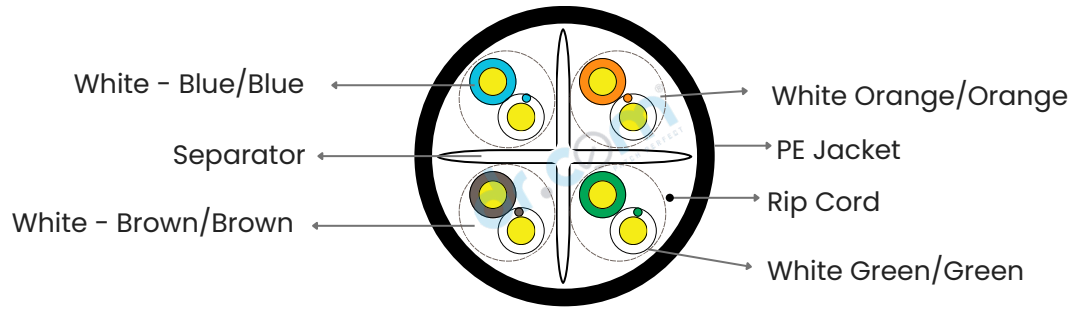


Specification

Model Part No	DR-CAT6_U/UTP-CU24_LS	
Category	CAT 6	
Reference Standard	ISO/IEC11801, ANSI/TIA-568.2-D	
Conductor	Material	Solid-Bare Copper (99.95%)
	Diameter	24AWG
Insulation	Material	HDPE
	Diameter	0.92 ± 0.05mm
Sheath	Thickness	0.50 ± 0.05 mm
	Diameter	5.8 ± 0.50 mm
	Material	LSZH
	Color	Custom Colors Available
Rip-cord	Yes	
Separator	Yes	
Electrical Characteristics (20°C)	1.0-500.0 MHz impedance	100 ± 15 Ω
	1.0-500.0 MHz delay skew	≤ 45 ns/100 m
	DC resistance	≤ 9.38 Ω/100 m
	DC conductor resistance unbalance	≤ 4.0%
	Ambient temperature	-20°C to 75°C (-4°F to 167°F)
	Operating voltage	57 V
	Physical Properties	Cable length
Package dimension		381 mm (W) × 381 mm (H) × 241 mm (D)
Weight		11 kg Approx
Packing		Spool

* Custom Lengths Available.

CAT6 UTP 24 AWG PE OUTDOOR CABLE

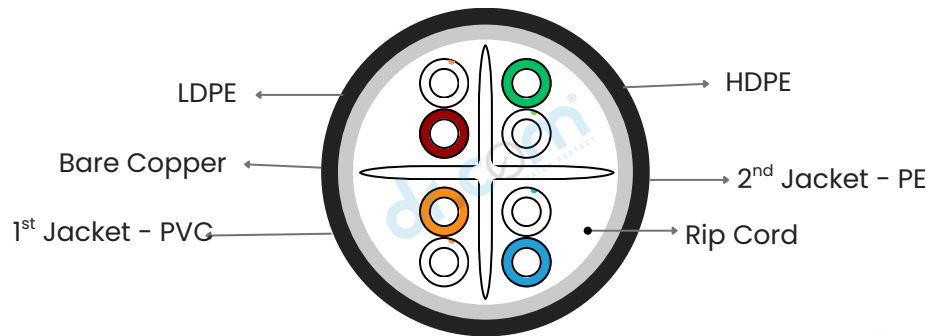


Specification

Model Part No	DR-CAT6_U/UTP-CU24_PE		
Category	CAT 6		
Reference Standard	ISO/IEC11801, ANSI/TIA-568.2-D		
Conductor	Material	Solid-Bare Copper (99.95%)	
	Diameter	24AWG	
Insulation	Material	HDPE	
	Diameter	0.92 ± 0.05mm	
Sheath	Thickness	0.50 ± 0.05 mm	
	Diameter	5.8 ± 0.50 mm	
	Material	PE	
	Color	Black (* Custom Colors Available)	
Rip-cord	Yes		
Separator	Yes		
Electrical Characteristics (20°C)	1.0-500.0 MHz impedance	100 ± 15 Ω	
	1.0-500.0 MHz delay skew	≤ 45 ns/100 m	
	DC resistance	≤ 9.38 Ω/100 m	
	DC conductor resistance unbalance	≤ 4.0%	
	Ambient temperature	-20°C to 75°C (-4°F to 167°F)	
	Operating voltage	57 V	
Physical Properties	Cable length	305 ± 0.5 m	100 ± 0.5 m
	Package dimension	381 mm (W) × 381 mm (H) × 241 mm (D)	260 mm (W) × 260 mm (H) × 108 mm (D)
	Weight	10.5 kg Approx	3.4 kg Approx
	Packing	Coil	Coil
* Custom Lengths Available.			

CAT6 UTP 24 AWG

DOUBLE JACKETED CABLE

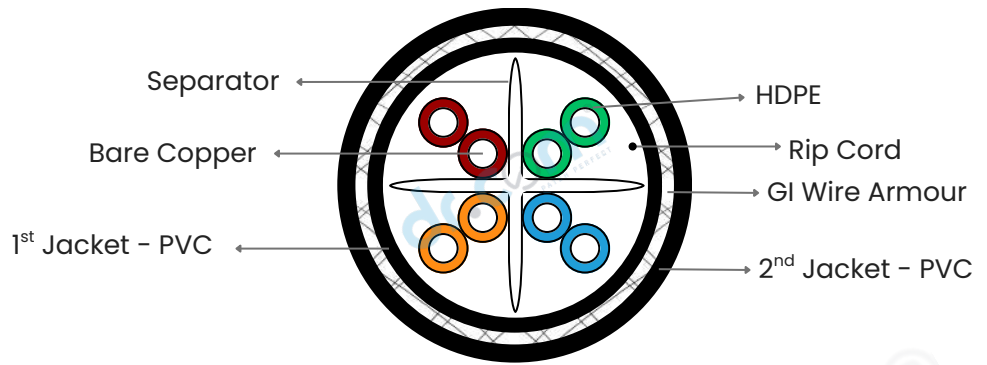


Specification

Model Part No	DR-CAT6_U/UTP-DC-CU24_PE	
Category	CAT 6	
Reference Standard	ISO/IEC11801, ANSI/TIA-568.2-D	
Conductor	Material	Solid-Bare Copper (99.95%)
	Diameter	24AWG
Insulation	Material	HDPE
	Diameter	0.92 ± 0.05mm
Sheath	Thickness	0.55 ± 0.05 mm
	Diameter	6.8 ± 0.50 mm
	Material	1 st Jacket - PVC 2 nd Jacket - PE
	Color	Black (* Custom Colors Available)
Rip-cord	Yes	
Separator	Yes	
Electrical Characteristics (20°C)	1.0-500.0 MHz impedance	100 ± 15 Ω
	1.0-500.0 MHz delay skew	≤ 45 ns/100 m
	DC resistance	≤ 9.38 Ω/100 m
	DC conductor resistance unbalance	≤ 4.0%
	Ambient temperature	-20°C to 75°C (-4°F to 167°F)
	Operating voltage	57 V
Physical Properties	Cable length	305 ± 0.5 m
	Package dimension	381 mm (W) × 381 mm (H) × 241 mm (D)
	Weight	15.5 kg Approx
	Packing	Spool

* Custom Lengths Available.

CAT6 UTP 24 AWG ARMoured CABLE



Specification

Model Part No	DR-CAT6_U/UTP-ARM-CU24_PV	
Category	CAT 6	
Reference Standard	ANSI/TIA 568-C.2 & ISO /IEC 11801	
Conductor	Material	Solid-Bare Copper (99.95%)
	Diameter	24AWG
Insulation	Material	HDPE
	Diameter	0.92 ± 0.05mm
Sheath	Thickness	0.55 ± 0.05 mm
	Diameter	9.5 ± 0.50 mm
	Material	1 st Jacket - PVC 2 nd Jacket - PVC
	Color	Black (* Custom Colors Available)
Rip-cord	Yes	
Separator	Yes	
Electrical Characteristics (20°C)	1.0-500.0 MHz impedance	100 ± 15 Ω
	1.0-500.0 MHz delay skew	≤ 45 ns/100 m
	DC resistance	≤ 9.38 Ω/100 m
	DC conductor resistance unbalance	Max. 5%
	Ambient temperature	-20°C to 75°C (-4°F to 167°F)
	Operating voltage	57 V
Physical Properties	Cable length	305 ± 0.5 m
	Package dimension	381 mm (W) × 381 mm (H) × 241 mm (D)
	Weight	44 kg Approx
	Packing	Spool

* Custom Lengths Available.

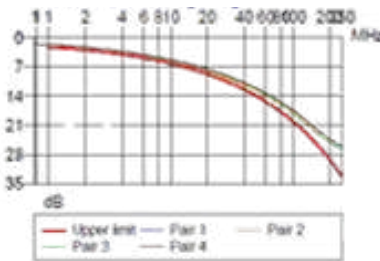
Requirements & Test Results

Capacitance

C [nF/100m]	
Upper limit	5.60
Lower limit	4.00
1-2	4.98
2-3	4.55
3-4	4.89
4-1	4.81

E [pF/100m]	
Upper limit	330
Lower limit	-330
1-2	0
2-3	170
3-4	225
4-1	3

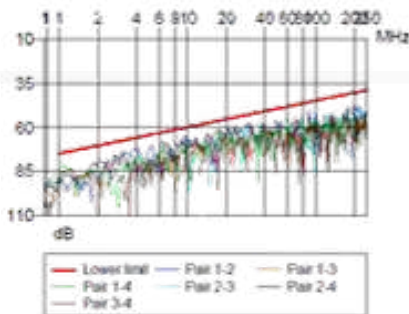
Attenuation [dB]



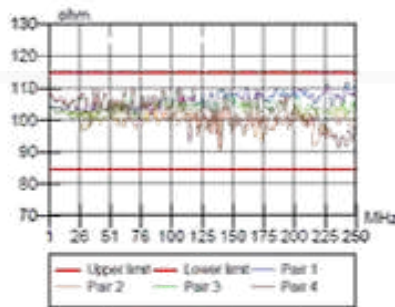
Attenuation Worst Case [dB]

Pair	Worst case	Value	Freq.
1	0.39	1.63	1.00
2	0.36	1.66	1.00
3	0.29	2.24	1.68
4	0.35	1.68	1.00

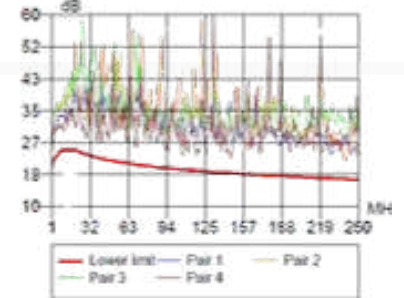
NEAR END XT [dB]



Impedance



RL [dB]



NEAR Worst Case [dB]

Pair	Worst case	Value	Freq.
1-2	5.09	64.79	9.40
1-3	6.79	63.10	15.82
1-4	5.88	61.72	17.01
2-3	6.33	60.76	21.12
2-4	5.86	60.38	20.82
3-4	7.31	69.18	6.75

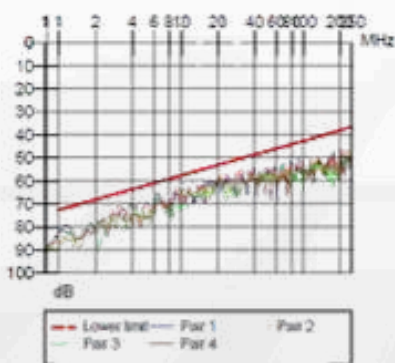
Impedance Statistics

Pair	Minimum	Freq. of min	Maximum	Freq. of max
1	100.01	40.65	111.57	242.52
2	90.36	139.09	109.02	107.94
3	99.32	37.53	107.47	203.27
4	90.73	140.34	111.26	0.77

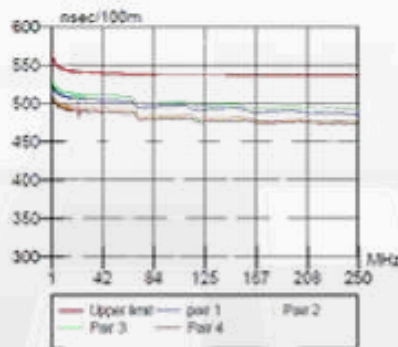
RL Worst Case [dB]

Pair	Worst case	Value	Freq.
1	5.97	23.37	243.15
2	4.62	22.08	238.78
3	7.87	30.76	40.03
4	3.58	23.45	107.94

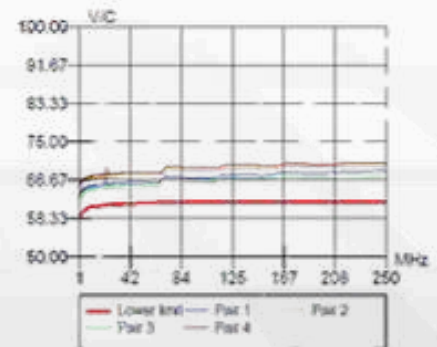
NEXT POWERSUM [dB]



Phase Delay [nsec]



Propagation Speed



NEXT POWERSUM Statistics

Pair	Worst case	Value	Freq.
1	5.46	65.70	6.37
2	4.76	57.09	21.43
3	7.04	59.47	21.12
4	6.24	54.62	39.32

Phase Delay Statistics

Pair	Worst case	Value	Freq.
1	34.83	503.76	61.54
2	47.03	491.52	62.44
3	29.74	508.84	61.54
4	50.80	487.92	58.09

Propagation Speed Statistics

Pair	Worst case	Value	Freq.
1	4.24	66.24	66.16
2	5.79	64.29	1.00
3	3.58	65.57	65.21
4	6.32	64.82	1.00

Technical Performance (Fluke 90-meter permanent link)

FREQ (MHz)	Insertion Loss (dB)	NEXT (dB)	RL (dB)	ACR-N (dB)	ACR-F (dB)	PS NEXT (dB)	PS ACR-N (dB)	PS ACR-F (dB)
1	3.0	65.0	19.1	62.0	64.2	62.0	59.0	61.2
4	3.5	64.1	21.0	60.6	52.1	61.8	58.3	49.1
8	5.0	59.4	21.0	54.4	46.1	57.0	52.1	43.1
10	5.5	57.8	21.0	52.3	44.2	55.5	49.9	41.2
16	7.0	54.6	20.0	47.6	40.1	52.2	45.2	37.1
20	7.9	53.1	19.5	45.2	38.2	50.7	42.8	35.2
25	8.9	51.5	19.0	42.7	36.2	49.1	40.2	33.2
31.25	10.0	50.0	18.5	40.0	34.3	47.5	37.6	31.3
62.5	14.4	45.1	16.0	30.8	28.3	42.7	28.3	25.3
100	18.6	41.8	14.0	23.3	24.2	39.3	20.7	21.2
200	27.4	36.9	11.0	9.6	18.2	34.3	7.0	15.2
250	31.1	35.3	10.0	4.2	16.2	32.7	1.6	13.2

Cable complies to Fluke 90-meter permanent link Alien cross talk as per ANSI/TIA 568.2-D Standard

Manufacturing Units

Plot No. 67 & 70, Damanganga Industrial Park-II, New Survey
No 3377 & 3380, Old Survey No 399/3/P, 1, Village - Dungra,
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