

Category 6A U/UTP CMP/CMR Cable

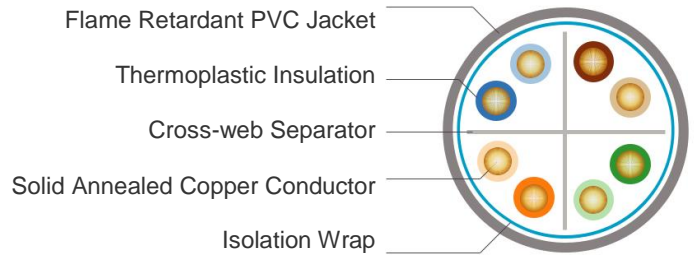
Luminetworx 6A U/UTP cable is capable of supporting 10GBASE-T applications and features a unique Isolation Wrap design, containing discontinuous sections of metallized material, held in place by a polymeric layer that delivers excellent alien crosstalk (AXT) protection. The product features a low outside diameter of 0.25" nominal (CMP) or 0.275" nominal (CMR) allowing for easier, more efficient installation and cable management. This also improves density and cooling. Luminetworx 6A U/UTP cable is third party verified by UL for Category 6A component compliance and is ideal for PoE applications requiring higher levels of current and is an excellent choice for HD A/V applications.

Applications

- ✓ 10BASE-T through 10GBASE-T Ethernet
- ✓ Power over Ethernet (PoE) IEEE 802.3bt-2018
- ✓ Backward compatible to legacy protocols and applications
- ✓ HDBaseT Class A and B

Features

- ✓ Non-Conductive Isolation Wrap for AXT protection
- ✓ Tested to 650MHz
- ✓ Low nominal outside diameter of 0.25" (CMP) 0.275" (CMR) allows for improved cable density and handling
- ✓ High cable density and reduced bend radius lowers installation cost
- ✓ No grounding or bonding required
- ✓ Power over Ethernet (PoE) IEEE 802.3bt-2018 compliant
- ✓ ANSI/TIA 568.2-D compliant
- ✓ UL verified Category 6A
- ✓ Ideal for A/V applications up to 100m channel



NOTE: Luminetworx 6A U/UTP cable is compliant with the ANSI/TIA 568.2-D two connector permanent link test when installed with Luminetworx 6A jack part numbers LVES-0RJ45-01/02.

Specifications

Commercial Standards	UL444 – CSA C22.2 No. 214-08; UL1666, NFPA 262, IEEE 802.bt-2018, Article 800, NEC (NFPA 70), HDBaseT Class A & B, UL Verified CAT6A
Mechanical	25lb Tensile Strength
Electrical (CMR/CMP)	DC Resistance Ohm/100m: 7.66/7.81 Skew ns/100m: 23.4/34.7 Propagation %: 66/71
Flame Rating	UL Listed CMR-LP (0.5), c(UL) Listed CMR, UL Listed CMP-LP (0.6), c(UL) Listed CMP
Environmental	RoHS & REACH Compliant
Physical (CMR/CMP)	4 Pair, 23 AWG Solid Annealed Copper Diameter: .275/.25 Weight lbs/K ft.: 29/35
Jacket	CMP: FEP, CMR: Thermoplastic, both with Aluminum Polyester Isolation Tape
Temperature Range	CMP: -4~194° F, CMR: -4~167° F

Electrical Specifications

Frequency	Insertion Loss @ 20° C		NEXT Minimum		ACR Minimum		PSNEXT Minimum		PSACR Minimum	
	Maximum dB/100m		dB/100m		dB/100m		dB/100m		dB/100m	
MHz	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical
1	2.1	2	74.3	78.3	72.2	77.3	72.3	77.3	70.2	76.3
4	3.8	3.7	65.3	69.3	61.5	66.6	63.3	68.3	59.5	65.6
8	5.3	5.1	60.8	64.8	55.4	60.6	58.8	63.8	53.4	59.6
10	5.9	5.7	59.3	63.3	53.4	58.6	57.3	62.3	51.4	57.6
16	7.5	7.3	56.2	60.2	48.8	54	54.2	59.2	46.8	53
20	8.4	8.1	54.8	58.8	46.4	51.7	52.8	57.8	44.4	51.2
25	9.4	9.1	53.3	57.3	44	49.7	51.3	56.3	42	49
31.25	10.5	10.2	51.9	55.9	41.4	47.2	49.9	54.9	39.4	46.7
62.5	15	14.4	47.4	51.4	32.4	39	45.4	50.4	30.4	38.4
100	19.1	18.4	44.3	48.3	25.2	32.4	42.3	47.3	23.2	31.7
200	27.6	26.5	39.8	43.8	12.2	20.1	37.8	42.8	10.2	19.5
250	31.1	29.8	38.3	42.3	7.3	15.5	36.3	41.3	5.3	15.1
300	34.3	32.9	37.1	41.1	2.9	11.4	35.1	40.1	0.9	10.8
400	40.1	38.3	35.3	39.3		4.6	33.3	38.3		3.6
500	45.3	43	33.8	37.8			31.8	36.8		
600		47.5		36.4				35.6		
650		49.7		35.9				35.1		
700		51.4		35.5				34.6		
750		53.3		35.1				34.2		

Frequency	Return Loss Minimum		ACRF Minimum		PSACRF Minimum		PSANEXT Minimum		PSAACRF Minimum	
	dB/100m		dB/100m		dB/100m		dB/100m		dB/100m	
MHz	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical
1	20	22	67.8	73.8	64.8	70.8	74	96.5	74	80
4	23	25	55.8	61.8	52.8	58.8	74	87.5	73.2	79.2
8	24.5	26.5	49.7	55.7	46.7	52.7	74	83	67.1	73.1
10	25	27	47.8	53.8	44.8	50.8	74	81.5	65.2	71.2
16	25	27	43.7	49.7	40.7	46.7	74	80	61.1	67.1
20	25	27	41.8	47.8	38.8	44.8	74	80	59.2	65.2
25	24.3	26.3	39.8	45.8	36.8	42.8	74	80	57.2	63.2
31.25	23.6	25.6	37.9	43.9	34.9	40.9	74	80	55.3	61.3
62.5	21.5	23.5	31.9	37.9	28.9	34.9	72.6	78.6	49.3	55.3
100	20.1	22.1	27.8	33.8	24.8	30.8	69.5	75.5	45.2	51.2
200	18	20	21.8	27.8	18.8	24.8	65	71	39.2	45.2
250	17.3	19.3	19.8	25.8	16.8	22.8	63.5	69.5	37.2	43.2
300	16.8	18.8	18.3	24.3	15.3	21.3	62.3	68.3	35.7	41.7
400	15.9	17.9	15.8	21.8	12.8	18.8	60.5	66.5	34.2	39.2
500	15.2	17.2	13.8	19.8	10.8	16.8	59	65	31.2	37.2
600		16.7		18.2		15.2		63.8		35.6
650		16.4		17.5		14.5		63.3		34.9
700		16.2		16.9		13.9				
750		16		16.3		13.3				