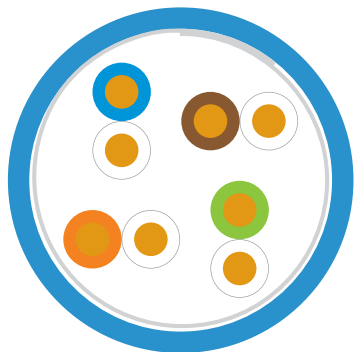**Berk-Tek**®

a **LEVITON** company

LM-RDT Cat 6A UTP CMP Cable

APPLICATION

LM-RDT cable features a reduced diameter of 0.230" (vs. 0.275" average Cat 6A cable), creating better flexibility, optimized cable management, and improved tray-fill ratio for high-density installations. It offers excellent signal isolation, with PoE and Alien Crosstalk performance that exceeds standards, making it an excellent choice for 802.11ac wireless, HD video and IP security. The cable's insulated metallic isolation wrap provides superior heat management and noise-cancelling performance, preventing electrical energy from running along the shield and eliminating the need for grounding. The electrical performance is independently verified by ETL (Intertek) as part of the LM Verified Performance program.

BENEFITS

- Compact design optimizes pathway space and reduces pathway costs over other 6A cables
- Improved flexibility and reduced bend radius enables ease of installation
- Elimination of cable cross-filler increases speed of installation and reduces jobsite waste for a more sustainable future
- Precision Twist Technology provides enhanced transmission performance
- Worry-free PoE performance and virtually unlimited bundle size and tray fill
- Made with Leviton FLX-1™ technology for maximum flexibility, tighter bend radius and smoother pulls
- Smaller size means lower weight per reel, less greenhouse gases emitted during transportation, and less warehouse space required for storage

FEATURES

- Reduced diameter of 0.230" (5.84mm)
- 8dB PSANEXT and PSAACRF margin to Cat 6A requirements
- Internal parameters compliant with Cat 6A standards
- Limited Power (LP) rating of 0.7 amps
- Listing Temperature of 105° C
- Performance to these specifications are independently verified by ETL in the LM Verified Performance program

CONSTRUCTION

Bare copper wire insulated with FEP. Two primaries are twisted together to form a pair and four such pairs are cabled together to form the basic unit. The cable core is surrounded by an insulated metallic isolation wrap and jacketed with flame-retardant polymer alloy.

STANDARDS & REGULATIONS

- ANSI/TIA-568.2-D Category 6A
- RoHS Compliant

FIRE RATING

- Plenum-NFPA 70, CMP
- UL Listed as CMP-LP (0.7A)

COUNTRY OF ORIGIN

USA

WARRANTY INFORMATION

For Leviton product warranties, go to leviton.com/warranty

LM-RDT™ Cat 6A UTP CMP Cable

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HIGH SPEED DATA AND POWER APPLICATIONS

IEEE 802.3	10GBASE-T (10 Gb/s), 2.5/5GBASE-T (2.5/5 Gb/s), 1000BASE-T (1 Gb/s), 100BASE-TX (100 Mb/s), 10BASE-T (10 Mb/s)
IEEE 802.3bt	PoE Types 1, 2, 3, and 4

PART NUMBERS

Description	Color	Packaging	Field Application	Part No.
LM-RDT Cat 6A UTP CMP Cable	Blue	Reel	Indoor	11141650
LM-RDT Cat 6A UTP CMP Cable	Orange	Reel	Indoor	11142236
LM-RDT Cat 6A UTP CMP Cable	Yellow	Reel	Indoor	11142234
LM-RDT Cat 6A UTP CMP Cable	Red	Reel	Indoor	11142237
LM-RDT Cat 6A UTP CMP Cable	Dark Gray	Reel	Indoor	11141959
LM-RDT Cat 6A UTP CMP Cable	Green	Reel	Indoor	11142235
LM-RDT Cat 6A UTP CMP Cable	Black	Reel	Indoor	11142239
LM-RDT Cat 6A UTP CMP Cable	Violet	Reel	Indoor	11142238
LM-RDT Cat 6A UTP CMP Cable	White	Reel	Indoor	11141651

CHARACTERISTICS

Dimensional characteristics

Length per reel	1000 ft
Number of pairs	4

Usage characteristics

Category	Cat 6A
Fire Safety	CMP - Plenum Rated
Recommended installation temperature range	5° C .. 50° C
Recommended operating temperature range	-20° C .. 60° C
Listed jacket temperature	105° C

COLOR CODE

Pair-1	White	Blue
Pair-2	White	Orange
Pair-3	White	Green
Pair-4	White	Brown

TECHNICAL SPECIFICATIONS

ELECTRICAL PROPERTIES (20° C ± 5° C)

DC resistance	Max. 9.38 Ω/100 m at 20° C
DC resistance unbalance	Max. 4%
Mutual capacitance	Nom. 5.1 nf/100 m at 1kHz
Capacitance unbalance (pair to ground)	Max. 330 pf/100 m at 1kHz
Nominal velocity of propagation	67%
Delay Skew	45 ns/100m max.

TECHNICAL DATA - PHYSICAL

Conductor	23 AWG Bare Copper	
Conductor Diameter - in. (mm)	0.022	(0.56)
Insulated Conductor Diameter - in. (mm)	0.043	(1.09)
Nom. Cable Diameter - in. (mm)	0.230	(5.84)
Nom. Cable Weight - lb./kft (kg/kft)	31	(14.06)
Max. Installation Tension - lb. (N)	25	(110)
Min. Bend Radius - in. (mm)	0.92	(23.37)

PRODUCT SPECIFICATIONS
LM-RDT™ Cat 6A UTP CMP Cable

LM-RDT™ Cat 6A UTP CMP Cable

GUARANTEED PRODUCT PERFORMANCE TRANSMISSION CHARACTERISTICS

Freq.	RL (dB)		NEXT (db)		PS NEXT (dB)		ACR (dB/100m)*		PSACR (dB/100m)	
MHz	TIA Spec	Product Guarantee	TIA Spec	Product Guarantee	TIA Spec	Product Guarantee	TIA Spec	Product Guarantee	TIA Spec	Product Guarantee
1	20.0	20.0	74.3	74.3	72.3	72.3	72.2	72.2	70.2	70.2
4	23.0	23.0	65.3	65.3	63.3	63.3	61.5	61.5	59.5	59.5
10	25.0	25.0	59.3	59.3	57.3	57.3	53.4	53.4	51.4	51.4
16	25.0	25.0	56.2	56.2	54.2	54.3	48.8	48.8	46.8	46.8
20	25.0	25.0	54.8	54.8	52.8	52.8	46.4	46.4	44.4	44.4
31.25	23.6	23.6	51.9	51.9	49.9	49.9	41.4	41.4	39.4	39.4
62.5	21.5	21.5	47.4	47.4	45.4	45.4	32.4	32.4	30.4	30.4
100	20.1	20.1	44.3	44.3	42.3	42.3	25.2	25.2	23.2	23.2
250	17.3	17.3	38.3	38.3	36.3	36.3	7.3	7.3	5.3	5.3
350	16.3	16.3	36.1	36.2	34.1	34.1	—	—	—	—
400	15.9	15.9	35.3	35.3	33.3	33.3	—	—	—	—
500	15.2	15.2	33.8	33.8	31.8	31.8				
600**	14.7	14.7	32.6	32.6	30.6	30.6	—	—	—	—
750	14.0	14.0	31.2	31.2	29.2	29.2	—	—	—	—

GUARANTEED PRODUCT PERFORMANCE TRANSMISSION CHARACTERISTICS, CONTINUED

Freq.	IL (dB/100m)		ACRF (dB/100m)		PSACRF (dB/100m)		PSANEXT (dB)		PSAACRF (dB)		LCL/TCL (dB)	EL TCTL (dB)
MHz	TIA Spec	Product Guarantee	TIA Spec	Product Guarantee	TIA Spec	Product Guarantee	TIA Spec	Product Guarantee	TIA Spec	Product Guarantee	Product Guarantee	Product Guarantee
1	2.1	2.1	67.8	67.8	64.8	64.8	75.0	83.0	75.0	83.0	50.0	35.0
4	3.8	3.8	55.8	55.8	52.8	52.8	75.0	83.0	74.2	82.2	44.0	23.0
10	5.9	5.9	47.8	47.8	44.8	44.8	75.0	83.0	66.2	74.2	40.0	15.0
16	7.5	7.5	43.7	43.7	40.7	40.7	75.0	83.0	62.1	70.1	38.0	10.9
20	8.4	8.4	41.8	41.8	38.8	38.8	75.0	83.0	60.2	68.2	37.0	9.0
31.25	10.5	10.5	37.9	37.9	34.9	34.9	75.0	83.0	56.3	64.3	35.1	—
62.5	15.0	15.0	31.9	31.9	28.9	28.9	73.6	81.6	50.3	58.3	32.0	—
100	19.1	19.1	27.8	27.8	24.8	24.8	70.5	78.5	46.2	54.2	30.0	—
250	31.1	31.1	19.8	19.8	16.8	16.8	64.5	72.5	38.2	46.2	26.0	—
350	37.2	37.2	16.9	16.9	13.9	13.9	62.3	70.3	35.3	43.3	24.6	—
400	40.1	40.1	15.8	15.8	12.8	12.8	61.5	69.5	34.2	42.2	23.4	—
500	45.3	45.3	13.8	13.8	10.8	10.8	60.0	68.0	32.2	40.2	23.0	—
600**	50.1	50.1	16.2	16.2	13.2	13.2	58.8	66.8	30.6	38.6	22.2	—
750	56.7	56.7	14.3	14.3	11.3	11.3	57.4	65.4	28.7	36.7	21.2	—

*Values for ACR are provided as calculations. **Values above 500 MHz are for information only.
For further support information, visit leviton.com/ns/support

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