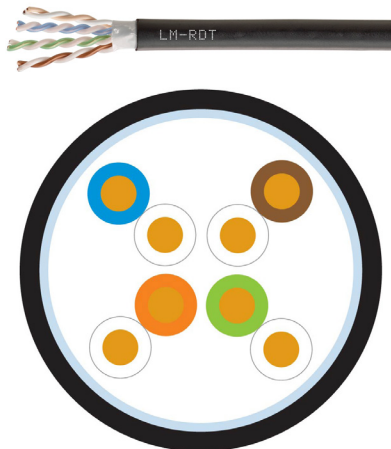


LM-RDT™ I/O Cat 6A UTP CMP

APPLICATION

LM-RDT I/O cable features the smallest diameter in the industry for a Cat 6A cable of its kind. This small diameter allows for better flexibility, optimized cable management, faster installs, and improved conduit-fill ratio for buildings utilizing slab-on-grade construction techniques. The rugged indoor/outdoor jacket offers protection from water, chemicals, and sunlight for select outdoor environments. It offers excellent signal isolation, with PoE and alien crosstalk performance that exceeds industry standards, making it an excellent choice for 802.11ac wireless, HD video, IP security, small cell, and all 10 Gigabit Ethernet applications. The cable's isolation wrap provides superior heat management and noise-reducing performance.



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 and lower weight per reel means less greenhouse gases emitted during transportation and less warehouse space required for storage

FEATURES

- Reduced diameter of 0.235" (5.97 mm)
- 8 dB PSANEXT and PSAACRF margin to Cat 6A requirements
- UV resistant
- Ruggedized jacket with FLX-1 technology for the best installation experience and resistance to water ingress
- Limited Power (LP) rating of 0.8 A
- Listing temperature of +150 °C (+302 °F)
- Performance to these specifications are independently verified by ETL in the Leviton Verified Performance program
- Gel-free construction for easy termination
- Sunlight Resistant jacket tested to 1000 hours

CONSTRUCTION

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

STANDARDS & REGULATIONS

- ANSI/TIA-568.2-D Category 6A
- RoHS Compliant
- IEEE 802.3bt PoE Type 1, 2, 3, 4 (90 watts max)
- Cisco UPOE, UPOE+ (90 watts max)
- Power over HDBaseT™ PoH (95 watts max)

FIRE RATING

- Plenum - NFPA 70
- CMP - Plenum Rated
- CMX Outdoor
- UL Listed as CMP-LP (0.8A)

WARRANTY INFORMATION

Must be installed per Leviton installation guidelines. Adherence to specific instructions is required to avoid water ingress and jacket abrasion during installation. Plenum indoor/outdoor cables do not contain water blocking gel; they are designed for various applications appreciably within the building footprint. Not recommended for underground inter-building connections, direct bury, or self-support applications. Please review installation specifics on the product web page leviton.com/berktek. Failure to follow installation instructions could void warranty. For Leviton product warranties, go to leviton.com/ns/warranty.

PRODUCT SPECIFICATIONS
LM-RDT™ I/O Cat 6A UTP CMP

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 1 kHz
Capacitance unbalance (pair to ground)	Max. 330 pf/100 m at 1 kHz
Nominal velocity of propagation	67%
Delay Skew	45 ns/100 m max.

CHARACTERISTICS

Dimensional characteristics

Length per reel	1000 ft (305 m)
Number of pairs	4

Usage characteristics

Category	Cat 6A
Fire Safety	CMP - Plenum Rated CMX - Outdoor
Temperature (Installation):	-10 °C to +50 °C (+14 °F to +122 °F)
Temperature (Operating):	-40 °C to +80 °C (-4 °F to +176 °F)
Temperature (Storage):	-20 °C to +60 °C (-4 °F to +140 °F)
Listed Cable Temperature	+150 °C (+302 °F)

COUNTRY OF ORIGIN

USA

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

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)	0.235	(5.97)
Nom. Cable Weight - lb./kft (kg/km)	31	(46.13)
Max. Installation Tension - lb. (N)	25	(110)
Min. Bend Radius - in. (mm)	0.94	(23.88)

COLOR CODE

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

GUARANTEED PRODUCT PERFORMANCE TRANSMISSION CHARACTERISTICS

Freq. MHz	RL (dB)		NEXT (db)		PS NEXT (dB)		ACR (dB/100 m)*		PSACR (dB/100 m)†	
	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	54.2	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	-1.1	-1.1	-3.1	-3.1
400	15.9	15.9	35.3	35.3	33.3	33.3	-4.8	-4.8	-6.8	-6.8
500	15.2	15.2	33.8	33.8	31.8	31.8	-11.4	-11.4	-13.4	-13.4
600**	—	14.7	—	32.6	—	30.6	—	-17.4	—	-19.4
750**	—	14.0	—	31.2	—	29.2	—	-25.5	—	-27.5

*Values for ACR are provided as calculations. **Values above 500 MHz are for information only.

†TIA Values for PSACR are provided as calculations only. PSACR is guaranteed up to 300 MHz for LM-RDT I/O.

PRODUCT SPECIFICATIONS
LM-RDT™ I/O Cat 6A UTP CMP

GUARANTEED PRODUCT PERFORMANCE TRANSMISSION CHARACTERISTICS, CONTINUED

Freq.	IL (dB/100 m)		ACRF (dB/100 m)		PSACRF (dB/100 m)		PSANEXT (dB)		PSAACRF (dB)		LCL/TCL (dB)	EL TCTL (dB)
	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	67.0	75.0	67.0	75.0	40.0	35.0
4	3.8	3.8	55.8	55.8	52.8	52.8	67.0	75.0	66.2	74.2	40.0	23.0
10	5.9	5.9	47.8	47.8	44.8	44.8	67.0	75.0	58.2	66.2	40.0	15.0
16	7.5	7.5	43.7	43.7	40.7	40.7	67.0	75.0	54.1	62.1	38.0	10.9
20	8.4	8.4	41.8	41.8	38.8	38.8	67.0	75.0	52.2	60.2	37.0	9.0
31.25	10.5	10.5	37.9	37.9	34.9	34.9	67.0	75.0	48.3	56.3	35.1	—
62.5	15.0	15.0	31.9	31.9	28.9	28.9	65.6	73.6	42.3	50.3	32.0	—
100	19.1	19.1	27.8	27.8	24.8	24.8	62.5	70.5	38.2	46.2	30.0	—
250	31.1	31.1	19.8	19.8	16.8	16.8	56.5	64.5	30.2	38.2	26.0	—
350	37.2	37.2	16.9	16.9	13.9	13.9	54.3	62.3	27.3	35.3	24.6	—
400	40.1	40.1	15.8	15.8	12.8	12.8	53.5	61.5	26.2	34.2	24.0	—
500	45.3	45.3	13.8	13.8	10.8	10.8	52.0	60.0	24.2	32.2	23.0	—
600*	—	50.1	—	12.2	—	9.2	—	58.8	—	30.6	22.2	—
750*	—	56.7	—	10.3	—	7.3	—	57.4	—	28.7	21.2	—

*Values above 500 MHz are for information only.

PART NUMBER

Description	Part Number
LM-RDT I/O Cat 6A UTP CMP Cable, black, reel	11142753

PRINT LEGEND (CMR):

BERK-TEK LM-RDT I/O UTP 23 AWG 150C CMX OUTDOOR-CMP C(UL)US CMP-LP (0.8A) SUNLIGHT RESISTANT---FT6 ETL VERIFIED TIA-568.2-D CAT6A [DATE] [COUNTER] [UID]

For further support information, visit leviton.com/ns/support