

LANmark-SST Reduced Diameter UTP Plenum Category 6A

LANmark-SST's reduced diameter (0.250" CMP vs. 0.275" for average Cat 6A cable) offers better flexibility, optimized cable management, and improved tray-fill ratio for high-density installations.

DESCRIPTION

LANmark™-SST is the smallest diameter, highest-performing Cat 6A cable. It offers outstanding signal isolation, excellent high-PoE performance and Alien Crosstalk performance that exceeds the standard, making it an excellent choice for high-power, high-bandwidth applications like 802.11ac wireless, HD video and IP security.

Its specially designed insulated metallic isolation wrap provides superior heat management and noise-cancelling performance preventing electrical energy from running along the shield, eliminating the need for grounding.

LANmark-SST's reduced diameter (0.250" CMP vs. 0.275" for average Cat 6A cable) offers better flexibility, optimized cable management, and improved tray-fill ratio for high-density installations.

Based on Berk-Tek's advanced testing, LANmark-SST has a Converged Application Score (CA Score) of 8.6 and is a great choice for high bandwidth requirements with excellent PoE performance and the superior choice for HD Video and 802.11ac wireless. For more information on CA Score, please click [here](#).

Construction:

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

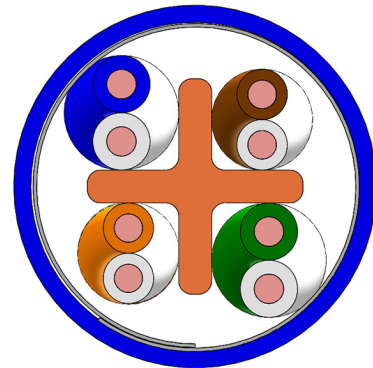
Flame Rating:

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

Reduced Diameter Benefits:

- Reduced cable size of 0.250" which is up to 8% nominal reduction versus the industry average of 0.275"
- Supports high-density applications and installations
- Improved pathway space and fill ratios - 15% increase in number of cables per tray versus average 0.275" size cable
- Small diameter provides better operational airflow and cooling in congested pathways such as a data center environment
- Smaller size allows for a smaller bend radius in tight spaces and improved cable management
- Reduced cable weight causes less strain on pathways and improves ease of installation

Perform Beyond Expectations, choose Berk-Tek.



STANDARDS

National ANSI/TIA 568.2-D; CSA
C22.2 N° 214-02; UL 444

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CHARACTERISTICS

Dimensional characteristics

Length per reel	1000.0 ft
Number of pairs	4

Usage characteristics

Category	Cat. 6A
Fire safety	CMP - Plenum Rated
Recommended operating temperature range	-20 .. 105 °C

PRODUCT LIST

Part Number	Description	Colour	Packaging	Field of application
11101842 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Blue	Reel	Indoor
11140408 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Orange	Reel	Indoor
11140403 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Yellow	Reel	Indoor
11140405 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Red	Reel	Indoor
11140402 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Dark grey	Reel	Indoor
11140404 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Green	Reel	Indoor
11140406 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Black	Reel	Indoor
11140407 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Violet	Reel	Indoor
11140401 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	White	Reel	Indoor
11140627 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Blue	Reel in a box	Indoor
11140635 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Orange	Reel in a box	Indoor
11140630 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Yellow	Reel in a box	Indoor
11140632 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Red	Reel in a box	Indoor
11140629 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Dark grey	Reel in a box	Indoor
11140631 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Green	Reel in a box	Indoor
11140633 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Black	Reel in a box	Indoor
11140634 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	Violet	Reel in a box	Indoor

LANmark-SST Reduced Diameter UTP Plenum Category 6A

Part Number	Description	Colour	Packaging	Field of application
11140628 New	LANmark-SST Reduced Diameter UTP Plenum Category 6A	White	Reel in a box	Indoor

LANMARK-SST PLENUM - TECHNICAL INFORMATION

Electrical Characteristics

FQ = Frequency (MHz) / TIA = TIA Spec / PG = Product Guarantee

FQ	RL (dB)		NEXT (dB)		PSNEXT (dB)		ACRF (dB)		PSANEXT (dB)		LCL/TCL
	TIA	PG	TIA	PG	TIA	PG	TIA	PG	TIA	PG	PG
1	20.00	20.00	74.30	74.30	72.30	72.30	67.80	71.80	67.00	77.00	50.00
4	23.00	23.00	65.30	65.30	63.30	63.30	55.80	59.80	67.00	77.00	44.0
10	25.00	25.00	59.30	59.30	57.30	57.30	47.80	51.80	67.00	77.00	40.00
16	25.00	25.00	56.20	56.30	54.20	54.30	43.70	47.70	67.00	77.00	38.00
20	25.00	25.00	54.80	54.80	52.80	52.80	41.80	45.80	67.00	77.00	37.00
31.25	23.60	23.60	51.90	51.90	49.90	49.90	37.90	41.90	67.00	77.00	35.10
62.5	21.50	21.50	47.40	47.40	45.40	45.40	31.90	35.90	65.60	76.60	32.00
100	20.10	20.10	44.30	44.30	42.30	42.30	27.80	31.80	62.50	72.50	30.00
250	17.30	17.30	38.30	38.30	36.30	36.30	19.80	23.80	56.50	66.50	26.00
350	16.30	16.30	36.10	36.20	34.10	34.20	16.90	20.90	—	64.30	24.60
400	15.90	15.90	35.30	35.30	33.30	33.30	15.80	19.80	53.50	63.50	23.40
500	15.20	15.20	33.80	33.80	31.80	31.80	13.80	17.80	52.00	62.00	23.00
600	—	14.70*	—	32.60*	—	30.60*	—	16.20*	—	60.80*	22.20*
750	—	14.00*	—	31.20*	—	29.20*	—	14.30*	—	59.40*	21.20*

FQ	IL (dB/100 m)		ACR (dB/100 m)		PSACR (dB/100 m)		PSACRF (dB/100 m)		PSAACRF (dB)		EL TCTL
	TIA	PG	TIA	PG	TIA	PG	TIA	PG	TIA	PG	PG
1	2.10	2.10	72.20	72.20	70.20	70.20	64.80	68.80	67.00	77.00	35.00
4	3.80	3.80	61.50	61.50	59.50	59.50	52.80	56.70	66.20	76.20	23.00
10	5.90	5.90	53.40	53.40	51.40	51.40	44.80	48.80	58.20	68.20	15.00
16	7.50	7.50	48.80	48.80	46.80	46.80	40.70	44.70	54.10	64.10	10.90
20	8.40	8.40	46.40	46.40	44.40	44.40	38.80	42.80	52.20	62.20	9.00
31.25	10.50	10.50	41.40	41.40	39.40	39.40	34.90	38.90	48.30	58.30	—
62.50	15.00	15.00	32.40	32.40	30.40	30.40	28.90	32.80	42.30	52.30	—
100	19.10	19.10	25.20	25.20	23.20	23.20	24.80	28.80	38.20	48.20	—
250	31.10	31.10	7.30	7.30	5.30	5.30	16.80	20.80	30.20	40.20	—
350	37.20	37.20	-1.10	-1.10	-3.10	-3.10	13.90	17.90	—	37.30	—
400	40.10	40.10	-4.80	-4.80	-6.80	-6.80	12.80	16.70	26.20	36.20	—
500	45.30	45.30	-11.40	-11.40	-13.40	-13.40	10.80	14.80	24.20	34.20	—
600	—	50.10*	—	—	—	—	—	13.20*	—	32.60*	—
750	—	56.70*	—	—	—	—	—	11.30*	—	30.70*	—

*Values provided for reference only

Parametric Measurements

Description

Mutual Capacitance (nominal)	5.1 nF Ohms/100m
DC Resistance	9.38 Ohms/100m max.
Skew	45 ns/100m max.
Pair-to-Ground Unbalance	330 pF/100m max.
Velocity of Propagation	70% nom.

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DC Resistance Unbalance 4% max.

Color Code

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

Supported Category 6A Applications

Standard	Application	Speed
IEEE 802.3an	10GBASE-T	10 Gb/s
IEEE 802.3	1000BASE-T	1 Gb/s
TIA/EIA 854	1000BASE-TX	1 Gb/s
ATM	155 Mb/s	155 Mb/s
CDDI		100 Mb/s
IEEE 802.3	100BASE-T	10 Mb/s
IEEE 802.3 af	PoE	1 Gb/s
IEEE 802.3 at	PoE+, Type 1 & 2	1 Gb/s
IEEE 802.3 bt	PoE++, Type 3 & 4, draft	10 Gb/s

Technical Data - Physical

Conductor	23 AWG Bare Copper	
Conductor Diameter - in. (mm)	0.022	(0.56)
Insulated Conductor Diameter - in. (mm)	0.042	(1.07)
Cable Diameter - in. (mm)	0.250	(6.35)
Nom. Cable Weight - lb./kft (kg/kft)	33	(14.97)
Max. Installation Tension - lb. (N)	25	(110)
Min. Bend Radius - in. (mm)	1.00	(25.40)

LANMARK-SST UTP PLENUM JACKET LEGEND

BERK-TEK LANMARK-SST UTP 23 AWG CMP 105C C(ETL)US CMP-LP (0.7A) ETL VERIFIED TIA-568.2-D CAT 6A [DATE] [COUNTER] [UID]" FT

LANMARK-SST CONVERGED APPLICATION SCORE

A cable's Converged Application Score (CA Score) is an indicator of how well IP traffic is protected and how much heat rise there is when the cable undergoes PoE testing. The score is represented by a numeric value between 1 and 10, with 1 being the lowest and 10 being the highest. In reality, a score of 1 is unattainable because it would represent no connection, as is a score of 10 because it would mean zero heat rise with high power PoE. CA Scores range between 2 and 9.

		LANmark-SST					
CA Score	Score	> 3.6	3.6 - 5.5	5.6 - 6.5	6.6 - 7.5	7.6 - 8.5	8.6 +
	Performance	Unacceptable	Poor	Limited	Good	Better	Best
	Heat Rise	Severe	Significant	Moderate	Moderate	Moderate	Low

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What does the CA Score tell you? A performance rating of "Poor" (less than 3.6) means that there were consistent noticeable flaws (dropped frames, media loss, etc) in the applications tested. As you move towards higher performance scores, you would notice fewer and fewer flaws, until you reach a score of 9, which is almost flawless. PoE testing is also an important factor; cables that experienced less temperature rise achieve higher CA Scores.

SELLING INFORMATION

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