

Cat6a Eco Series

U/UTP LSZH EuroClass: Dca

Key Features

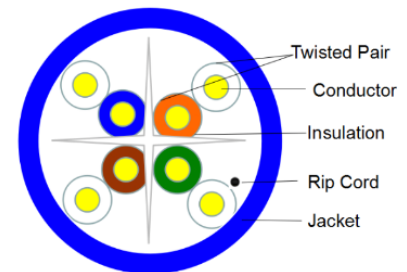
- 500*MHz Class Ea Bandwidth Performance
 - PoE Rated 30W/60W
 - 3rd Party ETL Verified
 - LSZH for Higher Fire Safety
 - CPR EuroClass: Dca-s2,d2,a1
 - Limited Lifetime Warranty**
 - Reelex II Tangle-Free Box
 - Strong, Lightweight, Resilient*
 - Environmental Friendly
 - Recyclable & Reusable
 - Up to 39% Less Waste Volume
- *Damaged boxes still dispense perfectly*
***Details at www.scpcat5e.com/warranties*

Description

Cat6a Eco Series UTP LSZH - 500*MHz ETL Verified 23 AWG Solid BC, 4PR, U/UTP, Pair Separator, Class Ea, PoE Type 2/3 30W/60W, CPR EuroClass: Dca-s2,d2,a1, LSZH Jacket

Applications

Supports all Category 6a and Class Ea applications including structured cabling for horizontal and building backbone, Ethernet 10/100/1000/10GBASE-T, indoor use, fixed installations, Power Over Ethernet (PoE), and other high bandwidth applications.



Construction

Conductor	Material	Bare Copper	Shielding/Screen	Type	Unshielded
	Solid/Stranded	Solid (0.565)		Material	na
	Size	23 AWG			
	Insulation Material	HDPE		Drain Wire	None
	Insulation OD	0.22mm			
	Color Code	Per ANSI/TIA 568.2-D		Jacket/Sheath	Material
Pair Separator/Spline	Twisted Pair	4P/2 Cores to Pair	Overall Cable Diameter (OD)	Nominal Jacket Thickness	LSZH
	Insulated Conductor OD	1.02+/-0.05mm		Color Code	0.55mm avg
					Per Request
Pair Separator/Spline	Material	LDPE	Overall Cable Diameter (OD)		6.4±0.4mm
	Spline OD	4.8 +/-0.5mm, 0.60 +/-0.1mm			
Rip Cord	Yes, Nylon				

Mechanical Properties

Bend Radius	Min Bend Radius (Installation)	8x Outer Diameter
	Min Bend Radius (Operation)	4x Outer Diameter
Maximum Pulling Tension	85N	
Insulation Tensile Strength	Unaged / Elongation %	12.3Mpa / 150%
	Aged / Elongation %	9.8Mpa / 100%
Jacket/Screen Tensile Strength	Unaged / Elongation %	13.8Mpa / 100%
	Aged / Elongation %	11.7Mpa / 50%
Cable Cold Bend (-20°C for 4 hrs)	No Crack	

Environmental Parameters

Temperature Range - Operating	-20°C to 75°C (-4°F to 167°F)
Temperature Range - Installation	0°C to 40°C (32°F to 104°F)
Temperature Range - Storage	0°C to 40°C (32°F to 104°F)

Environmental Compliance

RoHS Compliant: RoHS II/III, EU/UK RoHS
REACH, WEEE Directive, WFD:2023, SCIP:2023, POPs (EU) No 2019/1021
Reelex II Box - Recycled Materials; Less Waste for Improved Environmental Impact

Electrical Characteristics

Bandwidth per TIA Standard	500MHz	Capacitance Unbalance pair-to-ground	Max 3300 pf/km
Maximum Bandwidth as Tested	500MHz	Characteristic Impedance	100 +/- 15 Ohm
Conductor Resistance (at 20°C)	Max 93.8 Ohm/km	Nominal Velocity of Propagation % (NVP)	67-69%
Dielectric Strength	Min AC1.5KV	Rated Voltage	Insulated 300V
Spark Test	2.5KV		Operating Low Voltage 80V
AC Leakage Current thru Jacket/Screen	na	Delay Skew	Max 45ns / 100m
Resistance Unbalance	Max 5%	PoE Rating	802.3at/bt Type 2/3 30W/60W
Insulation Resistance	min 5000MΩ.km	Transverse Conversion Loss (TCL)	30 – 10log(f /100) @1-500MHz
Mutual Capacitance	5600pF/100m		

Standards Reference

Manufactured in Accordance to: ANSI/TIA 568.2-D, ISO/IEC 11801 Class E, EN 50288-5-1, ISO/IEC 61156-5, EN 50173-1, EN 50288-6-1, EN 50575

CPR EuroClass: Dca-s2,d2,a1

Reaction to Fire: BS EN 13501-6; EN ISO 1716; EN 50399, BS EN 60332-1-2; BS EN 61034-2; BS EN 60754-1&2

Power Over Ethernet (PoE): IEEE 802.3at/bt Type 2/3 (30W/60W)

Power Over HDBaseT (PoH): Yes

3rd Party Certification: ETL Verified

Cable Jacket Markings

Structured Cable Products --- CAT6A-ECO-LSZH-XX --- Cat6a Eco LSZH Series 500+MHz ETL Verified U/UTP ANSI/TIA 568.2-D ISO/IEC 11801 Class Ea 4PR 23 AWG SOL BC 75°C EN50575 Dca-s2,d2,a1 LSZH JKT CE RoHS ZONE/DEVICE A B C D E 0 1 2 3 4 5 6 7 8 9 *** Feet (or Meters) MM/YYYY

Above jacket markings are an example for reference purposes. All SCP jacket markings include descending feet or meter markings and our industry leading zone and outlet legend for easy cable identification during installation.

Performance Data*

Bandwidth MHz	Attenuation Max (dB/100m)		NEXT Min (dB)		PS NEXT Min (dB)		ACR Min (dB)		RL Min (dB)		ELFEXT Min (dB)		PS ELFEXT Min (dB)		PSACR Min (dB)	
	Standard	SCP	Standard	SCP	Standard	SCP	Standard	SCP	Standard	SCP	Standard	SCP	Standard	SCP	Standard	SCP
1	2.1	1.9	74.3	80.3	72.3	76.6	72.3	78.4	20	23.6	67.8	75.6	64.8	73.3	70.3	74.7
4	3.8	3.7	65.3	75.6	63.3	74.2	61.5	71.9	23	23.9	55.8	61.3	52.8	60.1	59.5	70.5
8	5.3	5.1	60.8	66	58.8	65.1	55.5	60.9	24.5	30	49.7	55.7	46.7	54.8	53.5	60
10	5.9	5.8	59.3	67.6	57.3	65.9	53.3	61.8	25	28.5	47.8	55.2	44.8	53.2	51.3	60.1
16	7.5	7.4	56.2	70.8	54.2	67.2	48.6	63.4	25	28.2	43.7	49.7	40.7	48.1	46.6	59.8
20	8.4	8.2	54.8	71.9	52.8	69.1	46.3	63.7	25	27.8	41.8	48.1	38.8	46.2	44.3	60.9
25	9.4	9.1	53.3	62.3	51.3	60.8	43.8	53.2	24.3	27.5	39.8	45.9	36.8	45	41.8	51.7
100	19.1	18.8	44.3	60	42.3	58	24.5	41.2	20.1	23.5	27.8	35	24.8	33.2	22.5	39.2
200	27.6	27.4	39.8	57.5	37.8	56	10.8	30.1	18	23.2	21.8	32.8	18.8	30.2	8.8	28.6
250	31.1	29.4	38.3	55.8	36.3	54.1	5.5	26.4	17.3	21.5	19.8	30.7	16.8	27.7	3.5	24.7
300	34.3	33.3	37.1	54.2	35.1	53.4	0.7	20.9	16.8	20.8	18.3	26.5	15.3	25.4	---	---
400	43	38.6	35.3	53.8	33.3	52.1	---	---	15.9	18.9	15.8	23.4	12.8	22.1	---	---
500	45.3	43.9	33.8	51	31.8	49.3	---	---	15.2	18.6	13.8	19.5	10.8	18.7	---	---

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Part Numbers

Item No.	UPC	Jacket Color	Package Length	Package Type	Package Weigth	Item Dimensions (mm)
North America:						
Not available at this time						
EU (EMEA)						
CAT6A-ECO-LSZH-BK	tbd	Black	1000ft/305m	Reelex II Tangle Free Box	16kg/35.2lb	430x275x420
CAT6A-ECO-LSZH-BL	tbd	Blue	1000ft/305m	Reelex II Tangle Free Box	16kg/35.2lb	430x275x420
CAT6A-ECO-LSZH-GN	tbd	Green	1000ft/305m	Reelex II Tangle Free Box	16kg/35.2lb	430x275x420