

CS41Z3, ETL Verified Category 6A U/UTP Cable, low smoke zero halogen, white jacket, 4 pair count, 1640 ft (500 m) length reel (EMEA)

Product Classification

Regional Availability EMEA

Portfolio NETCONNECT®

Product Type Twisted pair cable

General Specifications

Product Number CS41Z3

ANSI/TIA Category 6A

Cable Component Type Horizontal

Cable Type U/UTP (unshielded)

Conductor Type, singlesSolidConductors, quantity8Jacket ColorWhitePairs, quantity4

Separator Type Isolator

Transmission Standards ANSI/TIA-568.2-D | IEC 61156-5 | ISO/IEC 11801 Class EA

Dimensions

 Cable Length
 500 m | 1,640.42 ft

 Diameter Over Insulated Conductor
 1.08 mm | 0.043 in

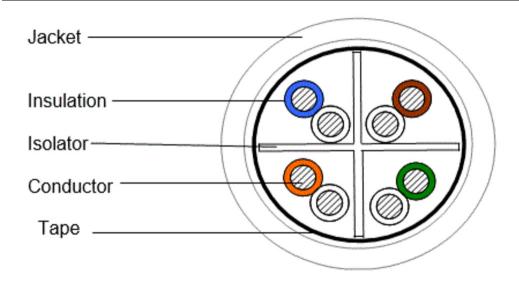
 Diameter Over Jacket, nominal
 6.985 mm | 0.275 in

 Jacket Thickness
 0.508 mm | 0.02 in

Conductor Gauge, singles 24 AWG

Cross Section Drawing





Electrical Specifications

dc Resistance Unbalance, maximum 4 %

dc Resistance, maximum 8 ohms/100 m | 2.438 ohms/100 ft

Delay Skew, maximum 45 ns

Dielectric Strength, minimum 1500 Vac | 2500 Vdc

Mutual Capacitance at Frequency 5.6 nF/100 m @ 1 kHz

Nominal Velocity of Propagation (NVP) 68 %

Operating Frequency, maximum 500 MHz

Operating Voltage, maximum 80 V

Remote PoweringFully complies with the recommendations set forth by IEEE 802.3bt (Type

4) for the safe delivery of power over LAN cable when installed according to ISO/IEC 14763-2, CENELEC EN 50174-1, CENELEC EN 50174-2 or TIA

TSB-184-A

Safety Voltage Rating 300 V

Segregation Class b

Flectrical Cable Performance

CS CommScope

STD Refers to the standard value listed under Transmission Standards in the Electrical Specifications above

TYP Typical Electrical Performance

IL Insertion Loss (dB/100m) NEXT Near End Crosstalk (dB/100m)

 ACR
 Attenuation to Crosstalk Ratio (dB/100m)
 PSNEXT
 Power Sum Near End Crosstalk (db/100m)

 PSACR
 Power Sum Attenuation to Crosstalk Ratio (dB/100m)
 ACRF
 Attenuation to Crosstalk Ratio - Far End (dB/100m)

PSACRF Power Sum Attenuation to Crosstalk Ratio - Far End (dB/100m) RL Return Loss (dB)

TCL Transverse Conversion Loss (dB/100m) ELTCTL Equal Level Transverse Conversion Transfer Loss (dB/100m)

Freq. MHz	IL STD	NEXT STD	ACR STD	PSNEXT STD	PSACR STD	ACRF	PSACRF STD	RL
4	3.8	66.3	62.5	63.3	59.5	55.9	53	23
8	5.3	61.7	56.4	58.7	53.4	49.9	46.9	24.5
10	5.9	60.3	54.4	57.3	51.4	48	45	25
16	7.5	57.2	49.7	54.2	46.7	43.9	40.9	25
20	8.4	55.8	47.4	52.8	44.4	42	39	25
25	9.4	54.3	44.9	51.3	41.9	40	37	24.3
31.25	10.5	52.9	42.4	49.9	39.4	38.1	35.1	23.6
62.5	15	48.4	33.4	45.4	30.4	32.1	29.1	21.5
100	19.1	45.3	26.2	42.3	23.2	28	25	20.1
155	24.1	42.4	18.3	39.4	15.3	24.2	21.2	18.8
200	27.6	40.8	13.2	37.8	10.2	22	19	18
250	31.1	39.3	8.3	36.3	5.3	20	17	17.3
300	34.3	38.1	3.9	35.1	0.9	18.4	15.5	16.8
350	37.2	37.1	-0.1	34.1	-3.1	17.1	14.1	16.3
400	40.1	36.3	-3.8	33.3	-6.8	15.9	13	15.9
500	45.3	34.8	-10.5	31.8	-13.5	14	11	15.2

Material Specifications

Conductor Material Bare copper

Insulation Material Polyolefin

Jacket Material Low Smoke Fire Retardant Zero Halogen (LSFRZH)

Separator Material Polyolefin

Tape Material Poly/Aluminum/Poly

Mechanical Specifications

Pulling Tension, maximum 11.34 kg | 25 lb

Environmental Specifications



Installation temperature 0 °C to +60 °C (+32 °F to +140 °F)

Operating Temperature $-20 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \left(-4 \,^{\circ}\text{F to } +140 \,^{\circ}\text{F}\right)$

Acid Gas Test Method IEC 60754-2

EN50575 CPR Cable EuroClass Fire PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings2EN50575 CPR Cable EuroClass Droplets Ratingd2EN50575 CPR Cable EuroClass Acidity Ratinga1

Environmental Space Low Smoke Zero Halogen (LSZH)

Flame Test Method EN 50399 | IEC 60332-3-22

Smoke Test Method IEC 61034-2

Packaging and Weights

Cable weight 44.451 kg/km | 29.87 lb/kft

Packaging Type Reel

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

