

CS41Z1, ETL Verified Category 6A U/UTP Cable, low smoke zero halogen, gray jacket, 4 pair count, 1000 ft (305 m) length reel

Product Classification

Regional Availability

Asia | Australia/New Zealand

Portfolio NETCONNECT®

Product Type Twisted pair cable

General Specifications

Product Number CS41Z1
ANSI/TIA Category 6A

Cable Component Type Horizontal

Cable Type U/UTP (unshielded)

Conductor Type, singlesSolidConductors, quantity8Jacket ColorGrayPairs, quantity4

Separator Type Isolator

Transmission Standards ANSI/TIA-568.2-D | IEC 61156-5

Dimensions

 Cable Length
 304.8 m | 1000 ft

 Diameter Over Conductor
 1.08 mm | 0.043 in

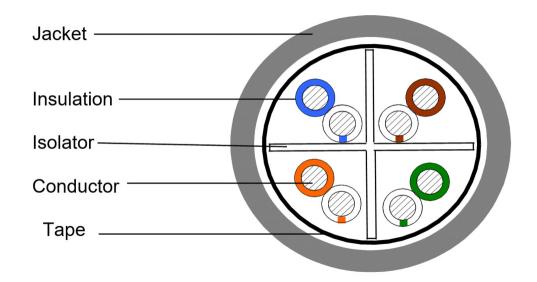
 Diameter Over Jacket, nominal
 6.985 mm | 0.275 in

 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, minimum1500 Vac | 2500 VdcMutual Capacitance at Frequency5.6 nF/100 m @ 1 kHz

Nominal Velocity of Propagation (NVP) 67 %

Remote Powering Fully 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 STD	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 Zero Halogen (LSZH)

Separator Material Polyolefin

Tape Material Poly/Aluminum/Poly

Mechanical Specifications

Pulling Tension, maximum 11.34 kg | 25 lb

Environmental Specifications



Installation temperature $0 \,^{\circ}\text{C}$ to +60 $^{\circ}\text{C}$ (+32 $^{\circ}\text{F}$ to +140 $^{\circ}\text{F}$)

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

Environmental Space Low Smoke Zero Halogen (LSZH)

Flame Test Method IEC 60332-1

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



