884017894/10 | CS31Z3 WHT C6 4/23 U/UTP RIB 305M



CS31Z3 Category 6 U/UTP Cable, low smoke zero halogen, white jacket, 4 pair count, 1000 ft (305 m) length reel-in-box

Alternative products available:

884017814/10 CS31Z3 Category 6 U/UTP Cable, CS31Z3 WHT C6 4/23 U/UTP CPK 305M 1000 ft (305 m) length Commpak

CS31Z3 Category 6 U/UTP Cable, low smoke zero halogen, white jacket, 4 pair count,

Product Classification

Regional Availability Asia

 Portfolio
 NETCONNECT®

 Product Type
 Twisted pair cable

Ordering Note Available in Asia Pacific

General Specifications

Product Number CS31Z3

ANSI/TIA Category 6

Cable Component Type Horizontal

Cable Type U/UTP (unshielded)

Conductor Type, singlesSolidConductors, quantity8Jacket ColorWhite

Note All electrical transmission tests include swept frequency measurements

Pairs, quantity 4

Separator Type Isolator

Supported Application 1000BASE-T | 1000BASE-TX | 100BASE-TX | 10BASE-T | 155Mbps

ATM | TP-PMD | Token Ring | VoIP

Transmission StandardsANSI/TIA-568.2-D | CENELEC EN 50288-6-1 | IEC 61156-5 | ISO/IEC 11801

Class E

Dimensions

Cable Length304.8 m | 1000 ftDiameter Over Insulated Conductor0.98 mm | 0.039 in

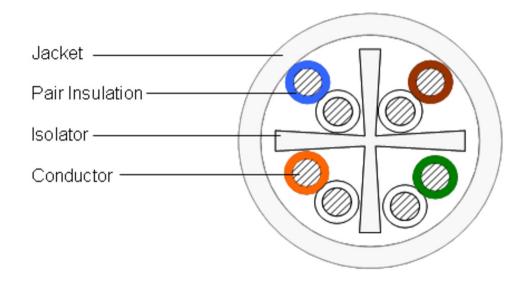
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Diameter Over Jacket, nominal 5.751 mm | 0.226 in

Conductor Gauge, singles 23 AWG

Cross Section Drawing



Electrical Specifications

Characteristic Impedance 100 ohm

dc Resistance Unbalance, maximum 5%

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

Delay Skew, maximum 45 ns

Dielectric Strength, minimum1500 Vac2500 VdcMutual Capacitance at Frequency5.6 nF/100 m @ 1 kHz

Nominal Velocity of Propagation (NVP) 68 %

Operating Frequency, maximum250 MHzOperating Voltage, maximum80 V

Propagation Delay, maximum 536 ns/100m @250MHz

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



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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		NEXT		ACR		PSNEXT		PSACR		ACRF		PSACRF		RL		TCL		ELTCTL	
	cs	STD	cs	STD	cs	STD	cs	STD	cs	STD	cs	STD	cs	STD	cs	STD	cs	STD	cs	STD
1	2	2	75.3	74.3	73.3	72.3	72.3	72.3	70.3	70.3	68	67.8	65	64.8	20	20	40	40	35	35
4	3.8	3.8	66.3	65.3	62.5	61.5	63.3	63.3	59.5	59.5	56	55.8	53	52.8	23	23	40	40	23	23
8	5.3	5.3	61.8	60.8	56.4	55.4	58.8	58.8	53.4	53.4	49.9	49.7	46.9	46.7	24.5	24.5	40	40	16.9	16.9
10	6	6	60.3	59.3	54.3	53.3	57.3	57.3	51.3	51.3	48	47.8	45	44.8	25	25	40	40	15	15
16	7.6	7.6	57.2	56.2	49.7	48.7	54.2	54.2	46.7	46.7	43.9	43.7	40.9	40.7	25	25	38	38	10.9	10.9
20	8.5	8.5	55.8	54.8	47.3	46.3	52.8	52.8	44.3	44.3	42	41.8	39	38.8	25	25	37	37	9	9
25	9.5	9.5	54.3	53.3	44.8	43.8	51.3	51.3	41.8	41.8	40	39.8	37	36.8	24.3	24.3	36	36	7	7
31.25	10.7	10.7	52.9	51.9	42.2	41.2	49.9	49.9	39.2	39.2	38.1	37.9	35.1	34.9	23.6	23.6	35.1	35.1		
62.5	15.4	15.4	48.4	47.4	33	32	45.4	45.4	30	30	32.1	31.9	29.1	28.9	21.5	21.5	32	32		
100	19.8	19.8	45.3	44.3	25.5	24.5	42.3	42.3	22.5	22.5	28	27.8	25	24.8	20.1	20.1	30	30		
155	25.2	25.2	42.4	41.4	17.3	16.3	39.4	39.4	14.3	14.3	24.2	24	21.2	21	18.8	18.8	28.1	28.1		
200	29	29	40.8	39.8	11.8	10.8	37.8	37.8	8.8	8.8	22	21.8	19	18.8	18	18	27	27		
250	32.8	32.8	39.3	38.3	6.5	5.5	36.3	36.3	3.5	3.5	20	19.8	17	16.8	17.3	17.3	26	26		

Material Specifications

Conductor Material Bare copper

Insulation Material Polyolefin

Jacket Material Low Smoke Zero Halogen (LSZH)

Separator Material Polyolefin

Mechanical Specifications

Minimum Bend Radius Note 4 times the outer cable diameter

Pulling Tension, maximum 11.34 kg | 25 lb

Transportation Vibration Standard ISTA-1A

Environmental Specifications

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

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



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Storage Temperature -20 °C to +80 °C (-4 °F to +176 °F)

Acid Gas Test Method IEC 60754-2

Environmental Space Low Smoke Zero Halogen (LSZH)

Flame Test Method IEC 60332-3-22

Smoke Test Method IEC 61034-2

Packaging and Weights

Cable weight 38.692 kg/km | 26 lb/kft

Packaging Type Reel in box

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Below maximum concentration value

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant

