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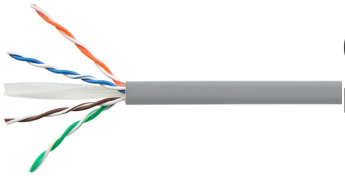

CS31Z1 Category 6 U/UTP Cable, low smoke zero halogen, gray jacket, 4 pair count, 1000 ft (305 m) length Commpak

Product Classification

Regional Availability	Asia
Portfolio	NETCONNECT®
Product Type	Twisted pair cable
Ordering Note	Available in Asia Pacific

General Specifications

Product Number	CS31Z1
ANSI/TIA Category	6
Cable Component Type	Horizontal
Cable Type	U/UTP (unshielded)
Conductor Type, singles	Solid
Conductors, quantity	8
Jacket Color	Gray
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 Standards	ANSI/TIA-568.2-D | CENELEC EN 50288-6-1 | IEC 61156-5 | ISO/IEC 11801 Class E

Dimensions

Cable Length	304.8 m | 1000 ft
Diameter Over Insulated Conductor	1.029 mm | 0.041 in
Diameter Over Jacket, nominal	5.842 mm | 0.23 in
Jacket Thickness	0.559 mm | 0.022 in
Conductor Gauge, singles	23 AWG

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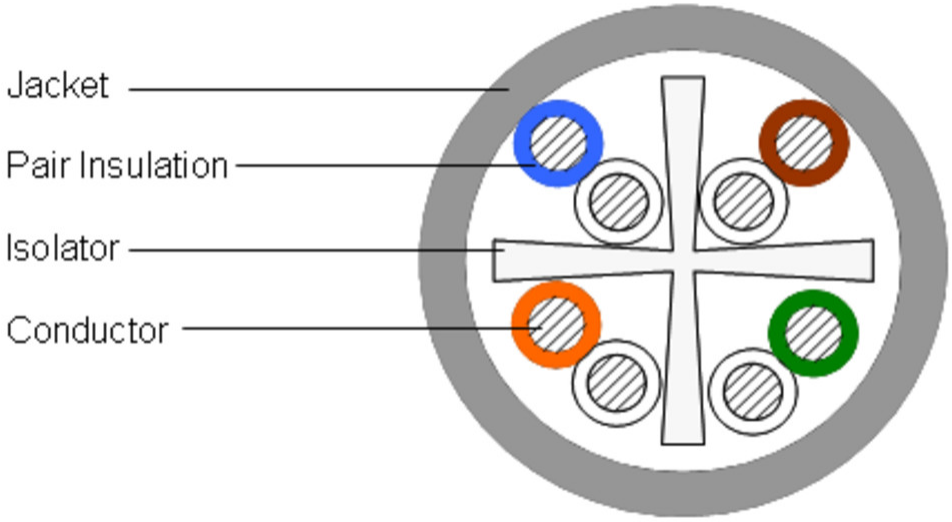
Cross Section Drawing



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, 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	250 MHz
Operating Voltage, maximum	80 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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Electrical 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)
ACR	Attenuation to Crosstalk Ratio (dB/100m)
PSACR	Power Sum Attenuation to Crosstalk Ratio (dB/100m)
PSACRF	Power Sum Attenuation to Crosstalk Ratio - Far End (dB/100m)
TCL	Transverse Conversion Loss (dB/100m)
NEXT	Near End Crosstalk (dB/100m)
PSNEXT	Power Sum Near End Crosstalk (db/100m)
ACRF	Attenuation to Crosstalk Ratio - Far End (dB/100m)
RL	Return Loss (dB)
ELTCTL	Equal Level Transverse Conversion Transfer Loss (dB/100m)

Freq. MHz	IL			NEXT			ACR			PSNEXT			PSACR			ACRF			PSACRF			RL			TCL		ELTCTL	
	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	CS	STD
1	2	2	1.7	75.3	74.3	85.8	73.3	72.3	84	72.3	72.3	83.8	70.3	70.3	82	68	67.8	78.7	65	64.8	77	20	20	36	40	40	35	35
4	3.8	3.8	3.5	66.3	65.3	78.3	62.5	61.5	74.9	63.3	63.3	76.2	59.5	59.5	72.7	56	55.8	66.8	53	52.8	65.2	23	23	35.6	40	40	23	23
8	5.3	5.3	4.9	61.8	60.8	74.9	56.4	55.4	70	58.8	58.8	72.5	53.4	53.4	67.6	49.9	49.7	60.5	46.9	46.7	59	24.5	24.5	33.1	40	40	16.9	16.9
10	6	6	5.5	60.3	59.3	72.7	54.3	53.3	67.2	57.3	57.3	70.5	51.3	51.3	65	48	47.8	58.9	45	44.8	57.2	25	25	33.8	40	40	15	15
16	7.6	7.6	7	57.2	56.2	70.3	49.7	48.7	63.4	54.2	54.2	68.1	46.7	46.7	61.1	43.9	43.7	54.9	40.9	40.7	53.3	25	25	35.9	38	38	10.9	10.9
20	8.5	8.5	7.8	55.8	54.8	68.8	47.3	46.3	61	52.8	52.8	66.6	44.3	44.3	58.8	42	41.8	52.8	39	38.8	51.3	25	25	35.6	37	37	9	9
25	9.5	9.5	8.7	54.3	53.3	67.3	44.8	43.8	58.5	51.3	51.3	64.9	41.8	41.8	56.2	40	39.8	50.5	37	36.8	49.1	24.3	24.3	35.7	36	36	7	7
31.25	10.7	10.7	9.8	52.9	51.9	65.7	42.2	41.2	55.8	49.9	49.9	63.5	39.2	39.2	53.7	38.1	37.9	48.7	35.1	34.9	47.2	23.6	23.6	34	35.1	35.1		
62.5	15.4	15.4	14	48.4	47.4	62.1	33	32	48.2	45.4	45.4	59.7	30	30	45.8	32.1	31.9	41.8	29.1	28.9	40.5	21.5	21.5	28.4	32	32		
100	19.8	19.8	17.8	45.3	44.3	58.5	25.5	24.5	40.7	42.3	42.3	56.3	22.5	22.5	38.6	28	27.8	38.2	25	24.8	36.6	20.1	20.1	29.7	30	30		
155	25.2	25.2	22.4	42.4	41.4	57.2	17.3	16.3	34.9	39.4	39.4	54	14.3	14.3	31.6	24.2	24	34.2	21.2	21	32.5	18.8	18.8	27.7	28.1	28.1		
200	29	29	25.5	40.8	39.8	54.3	11.8	10.8	28.8	37.8	37.8	52.1	8.8	8.8	26.6	22	21.8	32	19	18.8	30.4	18	18	27.7	27	27		
250	32.8	32.8	28.7	39.3	38.3	53	6.5	5.5	24.4	36.3	36.3	50.8	3.5	3.5	22.1	20	19.8	29.8	17	16.8	28.1	17.3	17.3	27	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

Environmental Specifications

Installation temperature	0 °C to +60 °C (+32 °F to +140 °F)
Operating Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Storage Temperature	-20 °C to +80 °C (-4 °F to +176 °F)

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Acid Gas Test Method	IEC 60754-2
Environmental Space	Low Smoke Zero Halogen (LSZH)
Flame Test Method	IEC 60332-1
Smoke Test Method	IEC 61034-2

Packaging and Weights

Cable weight	38.692 kg/km | 26 lb/kft
Packaging Type	CommPak® box

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