

CS31CM Category 6 U/UTP Cable, non-plenum, white jacket, 4 pair count, 1000 ft (305 m) length reel-in-box

OBSOLETE

This product was discontinued on: July 1, 2025

Replaced By:

884028514/10 CS31CM Category 6 U/UTP Cable, non-plenum, white jacket, 4 pair count, 1000 ft

CS31CM WHT C6 4/23 U/UTP CPK 305M (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 CS31CM

ANSI/TIA Category 6

Cable Component Type Horizontal

Cable Type U/UTP (unshielded)

Conductor Type, singlesSolidConductors, quantity8

Jacket Color White

NoteAll 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 | VolP

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

Class E

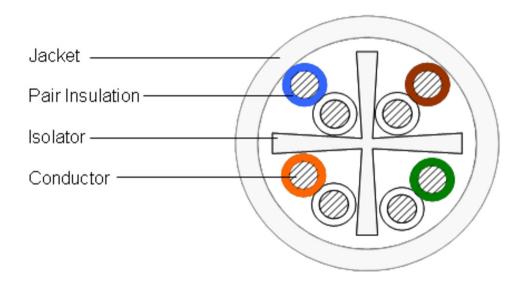
Dimensions



Cable Length304.8 m | 1000 ftDiameter Over Insulated Conductor0.98 mm | 0.039 inDiameter Over Jacket, nominal5.751 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 Vac | 2500 VdcMutual Capacitance at Frequency5.6 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 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

COMMSCOPE®

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 PVC

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 $^{\circ}\text{F}$)

COMMSCOPE®

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

Environmental Space Non-plenum

Flame Test Method CM

Packaging and Weights

Cable weight 38.543 kg/km | 25.9 lb/kft

Packaging Type CommPak® 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

