

CS31 Category 6 U/UTP Cable, non-plenum, blue 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

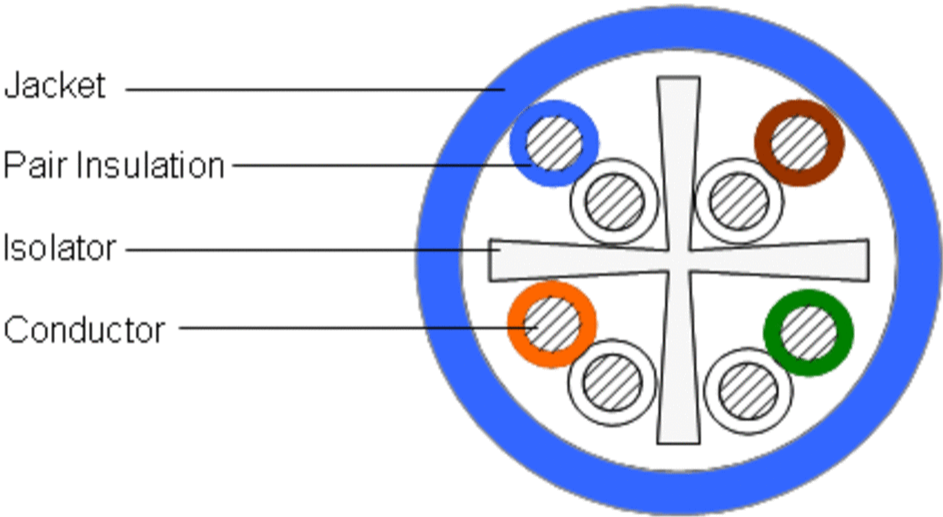
Product Number	CS31R
ANSI/TIA Category	6
Cable Component Type	Horizontal
Cable Type	U/UTP (unshielded)
Conductor Type, singles	Solid
Conductors, quantity	8
Jacket Color	Blue
Note	All electrical transmission tests include swept frequency measurements
Pairs, quantity	4
Separator Type	Isolator
Supported 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	1000 ft 304.8 m
Diameter Over Conductor	0.041 in 1.029 mm
Diameter Over Jacket, nominal	0.23 in 5.842 mm

Jacket Thickness	0.022 in 0.559 mm
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, minimum	1500 Vac 2500 Vdc
Mutual Capacitance at Frequency	5.6 nF/100 m @ 1 kHz
Nominal Velocity of Propagation (NVP)	68 %

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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

Electrical Performance

Freq (MHz)	IL (dB/100m)		NEXT (dB/100m)		ACR (dB/100m)		PSNEXT (dB/100m)		PSACR (dB/100m)		ACRF (dB/100m)		PSACRF (dB/100m)		RL (dB)		TCL		ELTCTL	
	CS	Std	CS	Std	CS	Std	CS	Std	CS	Std	CS	Std	CS	Std	CS	Std	CS	Std	CS	Std
1	2.0	2.0	75.3	74.3	73.3	72.3	72.3	72.3	70.3	70.3	68.0	67.8	65.0	64.8	20.0	20.0	40.0	40.0	35.0	35.0
4	3.8	3.8	66.3	65.3	62.5	61.5	63.3	63.3	59.5	59.5	56.0	55.8	53.0	52.8	23.0	23.0	40.0	40.0	23.0	23.0
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	40.0	40.0	16.9	16.9
10	6.0	6.0	60.3	59.3	54.3	53.3	57.3	57.3	51.3	51.3	48.0	47.8	45.0	44.8	25.0	25.0	40.0	40.0	15.0	15.0
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	25.0	25.0	38.0	38.0	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	42.0	41.8	39.0	38.8	25.0	25.0	37.0	37.0	9.0	9.0
25	9.5	9.5	54.3	53.3	44.8	43.8	51.3	51.3	41.8	41.8	40.0	39.8	37.0	36.8	24.3	24.3	36.0	36.0	7.0	7.0
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	33.0	32.0	45.4	45.4	30.0	30.0	32.1	31.9	29.1	28.9	21.5	21.5	32.0	32.0		
100	19.8	19.8	45.3	44.3	25.5	24.5	42.3	42.3	22.5	22.5	28.0	27.8	25.0	24.8	20.1	20.1	30.0	30.0		
155	25.2	25.2	42.4	41.4	17.3	16.3	39.4	39.4	14.3	14.3	24.2	24.0	21.2	21.0	18.8	18.8	28.1	28.1		
200	29.0	29.0	40.8	39.8	11.8	10.8	37.8	37.8	8.8	8.8	22.0	21.8	19.0	18.8	18.0	18.0	27.0	27.0		
250	32.8	32.8	39.3	38.3	6.5	5.5	36.3	36.3	3.5	3.5	20.0	19.8	17.0	16.8	17.3	17.3	26.0	26.0		

CS = CommScope | Std = Standard value listed under Transmission Standards in the Electrical Specifications | Typ = Typical

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	25 lb 11.34 kg

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)
Environmental Space	Non-plenum
Flame Test Method	CMR NEC Article 800 UL 1666 UL 444

Packaging and Weights

Cable weight	25.9 lb/kft 38.543 kg/km
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
ROHS	Compliant

