# Product Specifications



## 884016914/10 | CS31CM BLU C6 4/23 U/UTP CPK 305M

CS31CM Category 6 U/UTP Cable, non-plenum, blue jacket, 4 pair count, 1000 ft (305 m) length Commpak

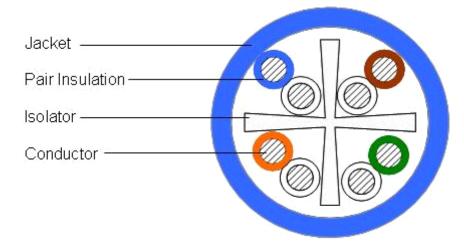
#### **Product Classification**

Portfolio NETCONNECT®

Product Type Twisted pair cable

Regional Availability Asia

### **Cross Section Drawing**



### **Construction Materials**

Jacket MaterialPVCConductor MaterialBare copperInsulation MaterialPolyolefinSeparator MaterialPolyolefin

#### **Dimensions**

Cable Length 305 m | 1000 ft

Cable Weight 25.90 lb/kft

Diameter Over Jacket 5.842 mm | 0.230 in Jacket Thickness 0.559 mm | 0.022 in

### **Electrical Specifications**

ANSI/TIA Category 6

Characteristic Impedance 100 ohm dc Resistance Unbalance, maximum 5 %

dc Resistance, maximum 7.61 ohms/100 m

Delay Skew, maximum 45 ns

Mutual Capacitance 5.6 nF/100 m @ 1 kHz

Nominal Velocity of Propagation (NVP) 68 % Operating Frequency, maximum 250 MHz

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Transmission Standards ANSI/TIA-568-C.2

Safety Voltage Rating 300 V

Dielectric Strength, minimum 1500 Vac | 2500 Vdc

Note All electrical transmission tests include swept frequency measurements

### **Environmental Specifications**

Environmental Space Non-plenum

Flame Test Method CM

Installation Temperature  $0 \, ^{\circ}\text{C} \text{ to } +60 \, ^{\circ}\text{C} \text{ (+32 } ^{\circ}\text{F to } +140 \, ^{\circ}\text{F)}$ Operating Temperature  $-20 \, ^{\circ}\text{C} \text{ to } +60 \, ^{\circ}\text{C} \text{ (-4 } ^{\circ}\text{F to } +140 \, ^{\circ}\text{F)}$ 

### **General Specifications**

Cable Type U/UTP (unshielded)
Packaging Type CommPak® box

Pairs, quantity 4

Cable Component Type Horizontal

Jacket Color Blue

Product Number CS31CM

Brand NETCONNECT®

Conductor Gauge, singles 23 AWG
Conductor Type, singles Solid
Conductors, quantity 8

Ordering Note Available in Asia Pacific

Separator Type Isolator

### **Mechanical Specifications**

Pulling Tension, maximum 11 kg | 25 lb

### **Regulatory Compliance/Certifications**

**Agency**RoHS 2011/65/EU

Classification
Compliant

ISO 9001:2008 Designed, manufactured and/or distributed under this quality management system



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#### **Electrical Performance**

Std Refers to the standard value listed under Transmission Standards in the Electrical Specifications above

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
	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
1	2.0	74.3	72.3	72.3	70.3	67.8	64.8	20.0	40.0	35.0
4	3.8	65.3	61.5	63.3	59.5	55.8	52.8	23.0	40.0	23.0
8	5.3	60.8	55.4	58.8	53.4	49.7	46.7	24.5	40.0	16.9
10	6.0	59.3	53.3	57.3	51.3	47.8	44.8	25.0	40.0	15.0
16	7.6	56.2	48.7	54.2	46.7	43.7	40.7	25.0	38.0	10.9
20	8.5	54.8	46.3	52.8	44.3	41.8	38.8	25.0	37.0	9.0
25	9.5	53.3	43.8	51.3	41.8	39.8	36.8	24.3	36.0	7.0
31.25	10.7	51.9	41.2	49.9	39.2	37.9	34.9	23.6	35.1	
62.5	15.4	47.4	32.0	45.4	30.0	31.9	28.9	21.5	32.0	
100	19.8	44.3	24.5	42.3	22.5	27.8	24.8	20.1	30.0	
155	25.2	41.4	16.3	39.4	14.3	24.0	21.0	18.8	28.1	
200	29.0	39.8	10.8	37.8	8.8	21.8	18.8	18.0	27.0	
250	32.8	38.3	5.5	36.3	3.5	19.8	16.8	17.3	26.0	