

ETL Verified Category 5e U/UTP Cable, non-plenum, orange jacket, 4 pair count, 1000 ft (305 m) length, CommPak



Product Classification

Regional Availability	Asia Australia/New Zealand Latin America North America
Portfolio	CommScope®
Product Type	Twisted pair cable

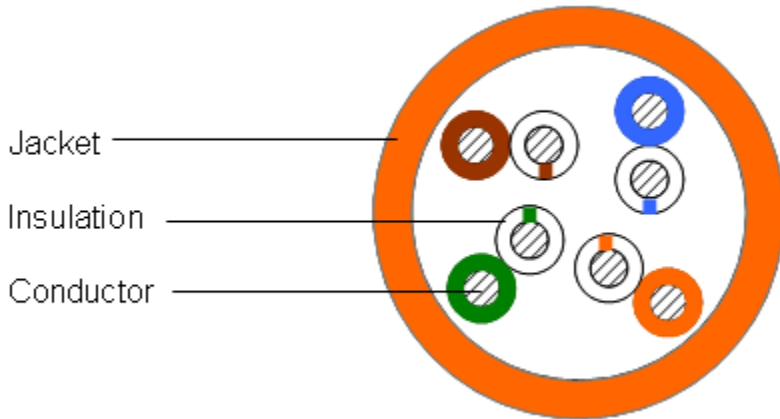
General Specifications

Product Number	CS27R
ANSI/TIA Category	5e
Cable Component Type	Horizontal
Cable Type	U/UTP (unshielded)
Conductor Type, singles	Solid
Conductors, quantity	8
Jacket Color	Orange
Note	All electrical transmission tests include swept frequency measurements
Pairs, quantity	4
Transmission Standards	ANSI/TIA-568.2-D CENELEC EN 50288-3-1 ISO/IEC 11801 Class D

Dimensions

Cable Length	304.8 m 1000 ft
Diameter Over Jacket, nominal	4.953 mm 0.195 in
Jacket Thickness	0.508 mm 0.02 in
Conductor Gauge, singles	24 AWG

Cross Section Drawing



Electrical Specifications

Characteristic Impedance	100 ohm
dc Resistance Unbalance, maximum	5 %
dc Resistance, maximum	9.38 ohms/100 m 2.859 ohms/100 ft
Delay Skew, maximum	15 ns
Dielectric Strength, minimum	1500 Vac 2500 Vdc
Mutual Capacitance at Frequency	5.6 nF/100 m @ 1 kHz
Nominal Velocity of Propagation (NVP)	69 %
Operating Frequency, maximum	350 MHz
Operating Voltage, maximum	80 V
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
Safety Voltage Rating	300 V

Electrical Cable Performance

CS	CommScope	NEXT	Near End Crosstalk (dB/100m)
STD	Refers to the standard value listed under Transmission Standards in the Electrical Specifications above	PSNEXT	Power Sum Near End Crosstalk (db/100m)
TYP	Typical Electrical Performance	ACRF	Attenuation to Crosstalk Ratio - Far End (dB/100m)
IL	Insertion Loss (dB/100m)	RL	Return Loss (dB)
ACR	Attenuation to Crosstalk Ratio (dB/100m)	ELTCTL	Equal Level Transverse Conversion Transfer Loss (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)		

Freq. MHz	IL			NEXT			ACR			PSNEXT			PSACR			ACRF			PSACRF			RL		
	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP
1	2	2	1.8	70.3	65.3	85	68.3	63.3	83.1	68.3	62.3	82.6	66.3	60.3	80.8	67.8	63.8	79.8	65.8	60.8	78	20	20	34.8
4	3.9	4.1	3.7	61.3	56.3	75.9	57.3	52.2	72.2	59.3	53.3	73.4	55.3	49.2	69.7	55.8	51.8	68.1	53.8	48.8	66.3	23	23	35.1
8	5.6	5.8	5.3	56.8	51.8	70.8	51.2	46	65.6	54.8	48.8	68.5	49.2	43	63.3	49.7	45.7	62.2	47.7	42.7	60.5	25	24.5	35.9
10	6.2	6.5	5.9	55.3	50.3	69.7	49.1	43.8	63.8	53.3	47.3	67.4	47.1	40.8	61.5	47.8	43.8	60.3	45.8	40.8	58.5	25.5	25	36.8
16	7.9	8.2	7.6	52.2	47.2	66.3	44.3	39	58.7	50.2	44.2	64	42.3	36	56.4	43.7	39.7	56.3	41.7	36.7	54.5	25.5	25	37.9
20	8.9	9.3	8.5	50.8	45.8	64.8	41.9	36.5	56.3	48.8	42.8	62.4	39.9	33.5	53.9	41.8	37.8	54.4	39.8	34.8	52.5	25.5	25	37.6
25	10	10.4	9.5	49.3	44.3	63.3	39.3	33.9	53.8	47.3	41.3	61	37.3	30.9	51.5	39.8	35.8	52.5	37.8	32.8	50.6	24.8	24.3	37.9
31.25	11.3	11.7	10.7	47.9	42.9	61.8	36.6	31.2	51.2	45.9	39.9	59.5	34.6	28.2	48.9	37.9	33.9	50.5	35.9	30.9	48.6	24.1	23.6	37.7
62.5	16.3	17	15.3	43.4	38.4	57.3	27.1	21.4	42	41.4	35.4	55.1	25.1	18.4	39.7	31.9	27.9	44.4	29.9	24.9	42.5	22	21.5	33.5
100	21	22	19.6	40.3	35.3	54.5	19.3	13.3	34.9	38.3	32.3	52.1	17.3	10.3	32.5	27.8	23.8	40.4	25.8	20.8	38.4	20.6	20.1	31
155	26.8		24.8	37.4		51.2	10.7		26.4	35.4		49	8.7		24.1	24		36.7	22		34.7	19.3		28.9
200	30.9		28.4	35.8		48.9	4.9		20.4	33.8		46.6	2.9		18.2	21.8		34.2	19.8		32.2	18.5		28.6
250	35		32	34.3		47.4	-0.7		15.4	32.3		45.1	-2.7		13.1	19.8		32	17.8		30	17.8		28
300	38.9		35.3	33.1		45.8	-5.8		10.5	31.1		43.5	-7.8		8.2	18.3		30.1	16.3		28.2	17.3		28.1
350	42.6		38.4	32.1		44.1	-10.4		5.7	30.1		41.9	-12.4		3.5	16.9		28.4	14.9		26.5	16.8		27.4

Material Specifications

Conductor Material	Bare copper
Insulation Material	Polyolefin
Jacket Material	PVC

Mechanical Specifications

Pulling Tension, maximum	11.34 kg 25 lb
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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)
Environmental Space	Non-plenum
Flame Test Method	CMR NEC Article 800 UL 1666 UL 444

Packaging and Weights

Cable weight 27.977 kg/km | 18.8 lb/kft
Packaging Type CommPak® box

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

