

Category 5e F/UTP Cable, non-plenum, white jacket, 4 pair count, 3000 ft (914 m) length, reel

Product Classification

Regional Availability Latin America | North America

Portfolio CommScope®

Product Type Twisted pair cable

General Specifications

Product Number CS24R
ANSI/TIA Category 5e

Cable Component Type Horizontal

Cable TypeF/UTP (shielded)

Conductor Type, singlesSolidConductors, quantity8Drain Wire TypeSolidJacket ColorWhite

NoteAll 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
 914.4 m | 3000 ft

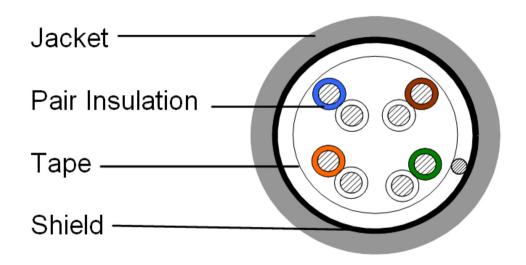
 Diameter Over Jacket, nominal
 6.147 mm | 0.242 in

 Jacket Thickness
 0.508 mm | 0.02 in

Conductor Gauge, singles24 AWGDrain Wire Gauge26 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, minimum1500 Vac | 2500 VdcMutual Capacitance at Frequency5.6 nF/100 m @ 1 kHz

Nominal Velocity of Propagation (NVP) 69 %

Operating Frequency, maximum 100 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

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	
	STD	TYP	STD	TYP	STD	TYP	STD	TYP	STD	TYP	STD	TYP	STD	TYP	STD	TYP
1	2	1.9	65.3	83.1	63.3	81.2	62.3	80.8	60.3	78.9	63.8	84.4	60.8	82.4	20	33
4	4.1	3.7	56.3	73.4	52.2	69.8	53.3	71.3	49.2	67.6	51.8	73.3	48.8	71.4	23	30.6
8	5.8	5.2	51.8	69	46	63.9	48.8	67	43	61.8	45.7	67.4	42.7	65.5	24.5	31.5
10	6.5	5.8	50.3	67.2	43.8	61.4	47.3	65.1	40.8	59.3	43.8	65.4	40.8	63.5	25	32.4
16	8.2	7.4	47.2	64.1	39	56.8	44.2	62	36	54.7	39.7	61.3	36.7	59.4	25	31.8
20	9.3	8.2	45.8	62.6	36.5	54.4	42.8	60.5	33.5	52.2	37.8	59.4	34.8	57.4	25	33
25	10.4	9.2	44.3	60.9	33.9	51.6	41.3	58.8	30.9	49.6	35.8	57.6	32.8	55.5	24.3	33.1
31.25	11.7	10.3	42.9	59.6	31.2	49.2	39.9	57.4	28.2	47.1	33.9	55.6	30.9	53.5	23.6	33.4
62.5	17	14.7	38.4	54.4	21.4	39.8	35.4	52.4	18.4	37.7	27.9	49.5	24.9	47.4	21.5	32.9
100	22	18.6	35.3	51	13.3	32.4	32.3	48.9	10.3	30.2	23.8	45.5	20.8	43.3	20.1	29.9
155		23.4		46.9		23.5		45.1		21.7		41.3		39.3		28
200		26.7		45.1		18.4		43.2		16.5		39.1		37		26
250		29.9		44.8		14.9		42.7		12.8		37.1		35.1		25.1
300		32.9		43		10.1		40.9		8		35.6		33.4		25
350		35.7		41.6		5.9		39.7		3.9		34.1		31.8		25.6

Material Specifications

Conductor Material Bare copper

Drain Wire Material Tinned copper

Insulation Material Polyolefin

Jacket Material PVC

Shield (Tape) Material Aluminum/Polyester

Mechanical Specifications

Pulling Tension, maximum 11.34 kg | 25 lb

Environmental Specifications

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

COMMSCOPE®

Environmental Space Non-plenum

Flame Test Method CMR | NEC Article 800 | UL 1666 | UL 444

Packaging and Weights

Cable weight 40.627 kg/km | 27.3 lb/kft

Packaging Type Reel

Regulatory Compliance/Certifications

Agency Classification

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

