

Ultra II® 5504M ETL Verified Category 5e U/UTP Cable, plenum, gray jacket, 4 pair count, 1000 ft (305 m) length, CommPak

#### **OBSOLETE**

#### Replaced By:

874038814/10 ETL Verified Category 5e U/UTP Cable, plenum, gray jacket, 4 pair count, 1000 ft (305 CS27P GRY C5E 4/24 U/UTP CPK 1KFT m) length, CommPak

#### **Product Classification**

Regional AvailabilityNorth AmericaPortfolioUniprise®

Product Type Twisted pair cable

Product Brand Ultra II®

General Specifications

Product Number 5504M
ANSI/TIA Category 5e

Cable Component Type Horizontal

Cable Type U/UTP (unshielded)

Conductor Type, singlesSolidConductors, quantity8Jacket ColorGray

**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

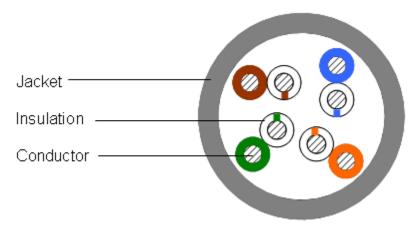
 Diameter Over Jacket, nominal
 4.902 mm | 0.193 in

 Jacket Thickness
 0.483 mm | 0.019 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, minimum1500 Vac | 2500 VdcMutual Capacitance at Frequency4.6 nF/100 m @ 1 kHz

Nominal Velocity of Propagation (NVP) 72 %

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



#### 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		
	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	23.3	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			26.4	35.4		49	8.7		24.1			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** FEP | Polyolefin

Jacket Material PVC

Mechanical Specifications

**Pulling Tension, maximum** 11.34 kg | 25 lb

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

Environmental Space Plenum
Flame Test Method CMP/FT6

Page 3 of 4



Smoke Test Method CMP/FT6

Packaging and Weights

**Cable weight** 33.231 kg/km | 22.33 lb/kft

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

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant





affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names,

trademarks and registered trademarks are property of their respective owners. Revised: September 6, 2023



Page 4 of 4