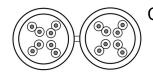


# Product: <u>1667ENH</u> ☑



# Cat 5e Duplex Cable, U/UTP, LSZH, 8 Pair, AWG 24, Indoor CPR Eca

# **Product Description**

Cat. 5e (100MHz) shotgun, 2 x 4-Pair, U/UTP Unshielded, Premise Horizontal Cable, 24 AWG solid bare copper conductors, Polyethylene insulation, LSZH jacket, RJ-45 compatible

# **Technical Specifications**

# **Product Overview**

Suitable Applications: Horizontal and building backbone cable; Support current and future Category 5e applications, su Base-T, FDDI, ATM	uch as: 1000Base-T (Gigabit Ethernet), 100 Base-T, 10
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# **Physical Characteristics (Overall)**

#### Conductor

Element	AWG	Stranding	Material	No. of Pairs
Individual pair	24	Solid	BC - Bare Copper	r 8
Conductor Count:			1	6
Total Number of Pairs:			8	

#### Insulation

Element	Туре	Material	Nominal	Diameter
Individual pair	Dielectric	Polyethylene	0.9 mm	
Bonded-Pair:				No

### Color Chart

Number	Color
Pair 1	White/Blue & Blue
Pair 2	White/Orange & Orange
Pair 3	White/Green & Green
Pair 4	White/Brown & Brown

#### **Outer Jacket Material**

Material I	Nominal Diameter Diameter +/-	Tolerance
LSZH / FRNC	5 mm 0.3 mm	
OuterJacket1, Table Note:		Figure 8 c

# **Construction and Dimensions**

Min Elongation at Breakof Conductors:	10 %
Min Elongation at Breakof Insulation:	100 %
OuterJacket1, Nominal Width:	10.5 mm
Min Elongation at Breakof Jacket:	100 %
Min Tensile Strength of Jacket:	9 MPa

# **Electrical Characteristics**

Conductor DCR									
Max. Conductor DCR	Max DCR Unbalanced Between Pairs [%]	Max. DCR Unbalanced Within Pair [%]							
95 Ohm/km	4 %	2 %							

#### Capacitance

Max. Capacitance Unbalance	Max. Mutual Capacitance
1,600 pF/m	56 pF/m

#### Impedance

Nominal Characteristic Impedance 100 Ohm

# Delay

Max. Delay Skew	Min. Velocity of Propagation
40 ns/100m	60 %

# High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. TCL [dB]	Min. ELTCTL [dB]
1 MHz	2.1 dB/100m	65.3 dB	62.3 dB	63.2 dB	60.2 dB	64 dB	61 dB	20 dB	40 dB	35 dB
4 MHz	4 dB/100m	56.3 dB	53.3 dB	52.32 dB	49.3 dB	52 dB	49 dB	23 dB	34 dB	23 dB
10 MHz	6.3 dB/100m	50.3 dB	47.3 dB	44 dB	41 dB	44 dB	41 dB	25 dB	30 dB	15 dB
16 MHz	8 dB/100m	47.2 dB	44.2 dB	39.2 dB	36.2 dB	39.9 dB	36.9 dB	25 dB	28 dB	10.9 dB
20 MHz	9 dB/100m	45.8 dB	42.8 dB	36.8 dB	33.8 dB	38 dB	35 dB	25 dB	27 dB	9 dB
31.25 MHz	11.4 dB/100m	42.9 dB	39.9 dB	31.5 dB	28.5 dB	34.1 dB	31.5 dB	23.6 dB	25.1 dB	5.5 dB
62.5 MHz	16.5 dB/100m	38.4 dB	35.4 dB	21.9 dB	18.9 dB	28.1 dB	25.1 dB	21.5 dB	22 dB	
100 MHz	21.3 dB/100m	35.3 dB	32.3 dB	14 dB	11 dB	24 dB	21 dB	20.1 dB	20 dB	
High Freq Tabl	e Note:	Limits	Limits below 4 MHz are for information only. Reference standard: ISO/IEC 61156-5 ed. 2.0 (2009)							
General Electri	cal Parameters Notes:	Refere	Reference standard: ISO/IEC 61156-5 ed. 2.0 (2009)							
Segregation cla	ass according EN50174-2:	а	a							

#### Current

Max. Recommended Current [A]
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1.5 A

#### Voltage

Voltage Rating [V] 72 V

# **Temperature Range**

Installation Temp Range:	0°C To +50°C
Operating Temp Range:	-30°C To +60°C

# **Mechanical Characteristics**

Bulk Cable Weight:	56 kg/km
Max Recommended Pulling Tension:	130 N
Min Bend Radius During Installation:	40 mm
Min Bend Radius During Operation:	20 mm

# Standards

ISO/IEC Compliance:	ISO/IEC 11801 Ed. 2.2:2002/A2:2010/C1:2011
CPR Euroclass:	Eca
CENELEC Compliance:	EN 50173-1 Ed. 3:2011
Data Category:	Category 5e
ANSI Compliance:	ANSI/TIA 568.2-D (2018)
IEEE Specification:	PoE: IEEE 802.3bt Type 1, Type 2, Type 3

# Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Eca
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01

# Flammability, LS0H, Toxicity Testing

ISO/IEC Flammability:	IEC 60332-1-2
Burning Load:	585 kJ/m

#### Part Number

Variants		
Item #	Color	Length
1667ENH.001000	Gray	1,000 m
1667ENH.00305	Gray	305 m
1667ENH.00500	Gray	500 m
1667ENH.01500	Violet	500 m
Patent:		
History		

Update and Revision:

Revision Number: 0.199 Revision Date: 10-28-2019

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