

PRODUCT OVERVIEW

Bellcom Category 5e indoor UTP cable is designed for structured cabling and horizontal network installations requiring reliable Cat5e performance. The cable uses 24AWG bare copper conductors, HDPE insulation, and a flame-retardant PVC jacket for indoor data, voice, and video applications.

FEATURES

- Category 5e UTP cable for structured network installations
- 4-pair construction with 24AWG bare copper conductors
- HDPE insulation with flame-retardant PVC outer jacket
- Nominal outer diameter: 5.2 mm
- Supports Gigabit Ethernet, Fast Ethernet, voice, T1, ISDN, ATM, and broadband video applications
- Designed to meet Category 5e requirements under ANSI/TIA, ISO/IEC, and CENELEC standards
- RoHS compliant and UL Listed

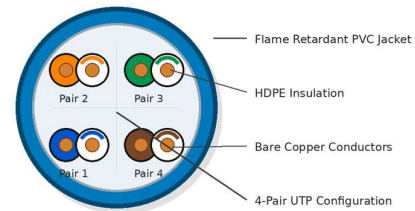
APPLICATIONS

- 1000BASE-T Gigabit Ethernet
- 10BASE-T / 100BASE-TX Fast Ethernet (IEEE 802.3)
- 100 VG-AnyLAN (IEEE 802.12), 155/622 Mbps ATM
- 550 MHz Broadband Video
- Voice, T1, ISDN

PRODUCT SUMMARY

Property	Specification
Product Type	Indoor UTP Cable
Category	Category 5e
Construction	24AWG x 4P
Conductor	Bare Copper
Insulation	HDPE
Jacket	Flame Retardant PVC
Outer Diameter	Nominal 5.2 mm
SKU	BC5E-UTP-W/B

CAT5e UTP Cable Configuration



CONSTRUCTION & CHARACTERISTICS

Component	Property	Specification
Conductor	Material / Size	Bare Copper / 24AWG
Insulation	Material	HDPE
Insulation	Thickness	Nominal: 0.20 mm
Insulation	Diameter	Nominal: 0.91 mm
Insulation	Colors	Blue/White-Blue; Orange/White-Orange; Green/White-Green; Brown/White-Brown
Insulation	Unaged Elongation	Min. 300%
Insulation	Unaged Tensile Strength	Min. 1.683 Kgf/mm ²
Jacket	Material	Flame Retardant PVC
Jacket	Thickness	Nominal: 0.5 mm
Jacket	Diameter	Nominal: 5.2 mm
Jacket	Color	Assorted upon request
Jacket	Unaged Elongation	Min. 100%
Jacket	Unaged Tensile Strength	Min. 1.407 Kgf/mm ²
Jacket Aging	Condition	100°C for 168 hours
Jacket Aging	Elongation Retention	Min. 50%
Jacket Aging	Tensile Strength Retention	Min. 75%

PAIR CONFIGURATION

Pair	Color Combination
Pair 1	Blue / White-Blue
Pair 2	Orange / White-Orange
Pair 3	Green / White-Green
Pair 4	Brown / White-Brown

UTP 4-pair construction with HDPE insulated conductors and a flame-retardant PVC jacket. The color configuration shown is used for pair identification during termination and structured cabling installation.

ELECTRICAL PERFORMANCE

Property	Specification
Dielectric Strength of Insulation	2500 V dc / 2 seconds
Insulation Resistance Test	Min. 5000 MΩ·Km
Conductor Resistance	Max. 9.38 Ω/100m at 20°C
Resistance Unbalance	Max. 2%
Capacitance Unbalance	Max. 160 pF/100m
Mutual Capacitance	Max. 5600 pF/100m
Impedance at 772 kHz	102Ω ± 15%
Impedance at 1-125 MHz	100Ω ± 15%

ATTENUATION & NEAR END CROSS TALK

Frequency	Max. Attenuation	NEXT	PSNEXT
1 MHz	2.0* dB/100m	65.3* dB Min.	62.3* dB Min.
4 MHz	4.1* dB/100m	56.3* dB Min.	53.3* dB Min.
8 MHz	5.8* dB/100m	51.8* dB Min.	48.8* dB Min.
10 MHz	6.5* dB/100m	50.3* dB Min.	47.3* dB Min.
16 MHz	8.2* dB/100m	47.2* dB Min.	44.2* dB Min.
20 MHz	9.3* dB/100m	45.8* dB Min.	42.8* dB Min.
25 MHz	10.4* dB/100m	44.3* dB Min.	41.3* dB Min.
31.25 MHz	11.7* dB/100m	42.9* dB Min.	39.9* dB Min.
62.5 MHz	17.0* dB/100m	38.4* dB Min.	35.4* dB Min.
100 MHz	22.0* dB/100m	35.3* dB Min.	32.3* dB Min.
125 MHz	24.9* dB/100m	33.8* dB Min.	30.8* dB Min.

Asterisked (*) values are for information only. Minimum NEXT coupling loss for any pair combination at room temperature is to be greater than: $NEXT(f \text{ MHz}) \geq NEXT(0.772) - 15\log_{10}(f \text{ MHz}/0.772)$ dB.

STANDARDS & APPROVALS

- ANSI/TIA-568-C.2 Cat.5e
- ISO/IEC 11801 2nd Edition Class D
- CENELEC EN 50173-1; CENELEC EN 50288-3-1
- IEC 61156-5 for horizontal cable
- Flame retardancy verified according to IEC 60332-1-2
- RoHS compliance implemented for EU Directive 2002/95/EC
- UL Listed

ORDERING INFORMATION

SKU	Product Description
BC5E-UTP-W/B	CAT5E Indoor UTP Cable, 24AWG x 4P, PVC

Color and packaging options should be confirmed at time of order.