

Cat.5E UTP Non-Booted Cables Series

Technical Data Sheet

CableMAX Model No. **CM-1004XXXXBSTK**

Digi-Key Series: **CM-10045EU**

Rev 250619

Length	Black	Blue	Grey	Green	Orange	Red	White	Yellow	Purple
0.5ft.	CM-100416BKBSTK	CM-100416BLBSTK	CM-100416GYBSTK	CM-100416GNBSTK	CM-100416ORBSTK	CM-100416RDBSTK	CM-100416WTBSTK	CM-100416YWBSTK	CM-100416PUBSTK
1ft.	CM-100401BKBSTK	CM-100401BLBSTK	CM-100401GYBSTK	CM-100401GNBSTK	CM-100401ORBSTK	CM-100401RDBSTK	CM-100401WTBSTK	CM-100401YWBSTK	CM-100401PUBSTK
1.5ft.	CM-100417BKBSTK	CM-100417BLBSTK	CM-100417GYBSTK	CM-100417GNBSTK	CM-100417ORBSTK	CM-100417RDBSTK	CM-100417WTBSTK	CM-100417YWBSTK	CM-100417PUBSTK
2ft.	CM-100413BKBSTK	CM-100413BLBSTK	CM-100413GYBSTK	CM-100413GNBSTK	CM-100413ORBSTK	CM-100413RDBSTK	CM-100413WTBSTK	CM-100413YWBSTK	CM-100413PUBSTK
3ft.	CM-100402BKBSTK	CM-100402BLBSTK	CM-100402GYBSTK	CM-100402GNBSTK	CM-100402ORBSTK	CM-100402RDBSTK	CM-100402WTBSTK	CM-100402YWBSTK	CM-100402PUBSTK
4ft.	CM-100400BKBSTK	CM-100400BLBSTK	CM-100400GYBSTK	CM-100400GNBSTK	CM-100400ORBSTK	CM-100400RDBSTK	CM-100400WTBSTK	CM-100400YWBSTK	CM-100400PUBSTK
5ft.	CM-100403BKBSTK	CM-100403BLBSTK	CM-100403GYBSTK	CM-100403GNBSTK	CM-100403ORBSTK	CM-100403RDBSTK	CM-100403WTBSTK	CM-100403YWBSTK	CM-100403PUBSTK
6ft.	CM-100414BKBSTK	CM-100414BLBSTK	CM-100414GYBSTK	CM-100414GNBSTK	CM-100414ORBSTK	CM-100414RDBSTK	CM-100414WTBSTK	CM-100414YWBSTK	CM-100414PUBSTK
7ft.	CM-100404BKBSTK	CM-100404BLBSTK	CM-100404GYBSTK	CM-100404GNBSTK	CM-100404ORBSTK	CM-100404RDBSTK	CM-100404WTBSTK	CM-100404YWBSTK	CM-100404PUBSTK
8ft.	CM-100419BKBSTK	CM-100419BLBSTK	CM-100419GYBSTK	CM-100419GNBSTK	CM-100419ORBSTK	CM-100419RDBSTK	CM-100419WTBSTK	CM-100419YWBSTK	CM-100419PUBSTK
10ft.	CM-100405BKBSTK	CM-100405BLBSTK	CM-100405GYBSTK	CM-100405GNBSTK	CM-100405ORBSTK	CM-100405RDBSTK	CM-100405WTBSTK	CM-100405YWBSTK	CM-100405PUBSTK
12ft.	CM-100474BKBSTK	CM-100474BLBSTK	CM-100474GYBSTK	CM-100474GNBSTK	CM-100474ORBSTK	CM-100474RDBSTK	CM-100474WTBSTK	CM-100474YWBSTK	CM-100474PUBSTK
15ft.	CM-100406BKBSTK	CM-100406BLBSTK	CM-100406GYBSTK	CM-100406GNBSTK	CM-100406ORBSTK	CM-100406RDBSTK	CM-100406WTBSTK	CM-100406YWBSTK	CM-100406PUBSTK
20ft.	CM-100415BKBSTK	CM-100415BLBSTK	CM-100415GYBSTK	CM-100415GNBSTK	CM-100415ORBSTK	CM-100415RDBSTK	CM-100415WTBSTK	CM-100415YWBSTK	CM-100415PUBSTK
25ft.	CM-100407BKBSTK	CM-100407BLBSTK	CM-100407GYBSTK	CM-100407GNBSTK	CM-100407ORBSTK	CM-100407RDBSTK	CM-100407WTBSTK	CM-100407YWBSTK	CM-100407PUBSTK
30ft.	CM-100475BKBSTK	CM-100475BLBSTK	CM-100475GYBSTK	CM-100475GNBSTK	CM-100475ORBSTK	CM-100475RDBSTK	CM-100475WTBSTK	CM-100475YWBSTK	CM-100475PUBSTK
35ft.	CM-100476BKBSTK	CM-100476BLBSTK	CM-100476GYBSTK	CM-100476GNBSTK	CM-100476ORBSTK	CM-100476RDBSTK	CM-100476WTBSTK	CM-100476YWBSTK	CM-100476PUBSTK
40ft.	CM-100477BKBSTK	CM-100477BLBSTK	CM-100477GYBSTK	CM-100477GNBSTK	CM-100477ORBSTK	CM-100477RDBSTK	CM-100477WTBSTK	CM-100477YWBSTK	CM-100477PUBSTK
50ft.	CM-100408BKBSTK	CM-100408BLBSTK	CM-100408GYBSTK	CM-100408GNBSTK	CM-100408ORBSTK	CM-100408RDBSTK	CM-100408WTBSTK	CM-100408YWBSTK	CM-100408PUBSTK
75ft.	CM-100409BKBSTK	CM-100409BLBSTK	CM-100409GYBSTK	CM-100409GNBSTK	CM-100409ORBSTK	CM-100409RDBSTK	CM-100409WTBSTK	CM-100409YWBSTK	CM-100409PUBSTK
100ft.	CM-100410BKBSTK	CM-100410BLBSTK	CM-100410GYBSTK	CM-100410GNBSTK	CM-100410ORBSTK	CM-100410RDBSTK	CM-100410WTBSTK	CM-100410YWBSTK	CM-100410PUBSTK
150ft.	CM-100411BKBSTK	CM-100411BLBSTK	CM-100411GYBSTK	CM-100411GNBSTK	CM-100411ORBSTK	CM-100411RDBSTK	CM-100411WTBSTK	CM-100411YWBSTK	CM-100411PUBSTK
200ft.	CM-100412BKBSTK	CM-100412BLBSTK	CM-100412GYBSTK	CM-100412GNBSTK	CM-100412ORBSTK	CM-100412RDBSTK	CM-100412WTBSTK	CM-100412YWBSTK	CM-100412PUBSTK

Specifications

* Information listed represents all cables within this series

• Cable Specifications:

CAT5E UTP 4 X 1P[24AWG(7/0.175mm±0.008mm BC)]
CM PVC JACKET OD: 5.3±0.20mm

• Standard Reference:

- All Category 5e Requirements as Per ANSI/TIA, ISO/IEC, and CENELEC EN Standards
- ANSI/TIA-5682-D Cat.5e
- ISO/IEC 3rd Edition 11801 Class D
- We Implemented RoHS Compliance for the Requirement of European Union Issued Directive 2011/65/EU

• Physical characteristic

- Rated temperature: 75°C
- Installation temperature: -20-60°C
- Operating temperature: -20-75°C
- Min bending radius:15xOD in Operation:10xOD after operation

• Application

- 1000BASE-T Gigabit Ethernet
- 10BASE-T, 100BASE-TX Fast Ethernet (IEEE 802.3)
- 100 VG - AnyLAN(IEEE802.12)
- 100MHz Broadband Video Voice, T1, ISDN

Compliance

Compliant with TIA/EIA standard by UL; RoHS Compliant



Electrical Performance

CABLE CONSTRUCTION		
Conductor	Material	Stranded Bare Copper
	Nom.O.D (mm)	7/0.175±0.008mm 24AWGx4P
Insulation HDPE	Average Thickness(mm)	0.20
	Insulation Dia.(±0.05mm)	0.75
	Unaged Elongation	Min. 300%
	Unaged Tensile Strength	Min.1.683 Kgf/mm ²
Code Color	1 Blue/Blue*White	2 Orange/Orange*White
	3 Green/Green*White	4 Brown/Brown*White
Jacket CM PVC	Average Thickness (mm)	0.6
	Outer Dia.(±0.20mm)	5.3
	Unaged Elongation	Min. 100%
	Unaged Tensile Strength	Min.1.407 Kgf/mm ²
	Aging at 100°C for 168Hrs	Min. elongation retention:50% Min. tensile strength retention:75%
Marking	YFC UTP CAT.5E 350MHZ PATCH ISO/IEC 11801 & EN 50288 & ANSI/TIA-568.2-D 3P CONFORMS TO GIGABIT ETHERNET ▲ 24AWGX4P TYPE CM(UL) E164469-B3	

CHARACTERISTICS	
Dielectric Strength of Insulation	1500 V dc / 1 minute
Insulation Resistance Test	Min. 5000 MΩ·Km
Conductor Resistance	Max. 11.25 Ω/100m at 20°C
Resistance Unbalance	Max. 2%
Capacitance Unbalance	Max. 220 pF/100m

TECHNICAL PERFORMANCE			
TIA Cat 5E Channel Test			
Frequency (MHz)	Insertion Loss	RL Min (dB)	NEXT Min (dB)
1	3.0	17.0	60.0
4	4.5	17.0	53.5
8	6.3	17.0	48.6
10	7.1	17.0	47.0
16	9.1	17.0	43.6
20	10.2	17.0	42.0
25	11.4	16.0	40.3
31.25	12.9	15.1	38.7
62.25	18.6	12.1	33.6
100	24.0	10.0	30.1

Frequency (MHz)	PSNEXT (dB/100m)	ACR-F (dB/100m)	PS ACR-F (dB/100m)	Impedance (Ohms)
1	57.0	57.4	54.4	100±15
4	50.5	45.4	42.4	
8	45.6	39.3	36.3	
10	44.0	37.4	34.4	
16	40.6	33.3	30.3	
20	39.0	31.4	28.4	
25	37.3	29.4	26.4	
31.25	35.7	27.5	24.5	
62.25	30.6	21.5	18.5	
100	37.1	17.4	14.4	

Configuration

Cable Cross-Section Structure

