

# CAT.6A Armored Cables Series

Technical Data Sheet

CableMAX Model No. **CM-1007XXARMBSTK**

Rev 250821

Length	Black 24AWG
3ft.	CM-100753ARMBSTK
5ft.	CM-100755ARMBSTK
7ft.	CM-100757ARMBSTK
10ft.	CM-100758ARMBSTK
25ft.	CM-100761ARMBSTK
50ft.	CM-100763ARMBSTK
65ft.	CM-100766ARMBSTK

## Specifications

*\* Information listed represents all cables within this series*

### • Cable Specifications:

CAT6A UTP 4 X 1P[24AWG(7/0.20mm±0.008mm BC)]+CROSS  
CM PVC+SUS 304 JACKET OD: 7.8±0.20mm

### • Standard Reference:

- All Category 6A Requirements as Per ANSI/TIA, ISO/IEC, and CENELEC EN Standards
- ANSI/TIA-5682-D Cat.6A
- ISO/IEC 3rd Edition 11801 Class Ea
- 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

## Applications

- 1000BASE-T Gigabit Ethernet
- 10BASE-T, 100BASE-TX Fast Ethernet (IEEE 802.3)
- 100 VG - AnyLAN(IEEE802.12)
- 500MHz Broadband Video Voice, T1, ISDN

## Compliance

Compliant with TIA/EIA standard by UL & ETL; RoHS Compliant



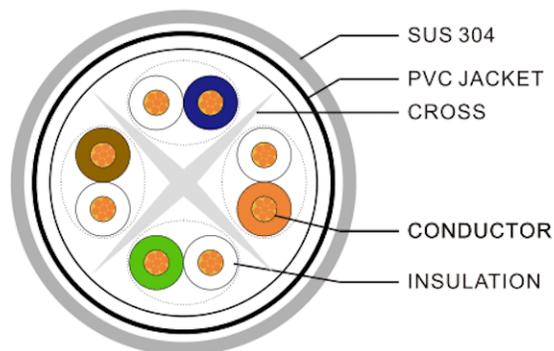
# Electrical Performance

CABLE CONSTRUCTION		
Conductor	Material	Stranded Bare Copper
	Nom.O.D (mm)	7/0.20±0.008mm 24AWGx4P
Insulation HDPE	Average Thickness(mm)	0.18
	Insulation Dia.(±0.05mm)	0.95
	Unaged Elongation	Min. 300%
	Unaged Tensile Strength	Min.1.683 Kgf/mm <sup>2</sup>
Code Color	1 Blue/Blue*White	2 Orange/Orange*White
	3 Green/Green*White	4 Brown/Brown*White
The cross - PE	0.3*4.20mm (±0.05mm/±0.1mm)	
Jacket CM PVC+SUS 304	Average Thickness (mm)	0.6
	Outer Dia.(±0.20mm)	7.8
	Unaged Elongation	Min. 100%
	Unaged Tensile Strength	Min.1.407 Kgf/mm <sup>2</sup>
	Aging at 100°C for 168Hrs	Min. elongation retention:50% Min. tensile strength retention:75%
Marking	/	

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

## Configuration

### Cable Cross-Section Structure



TECHNICAL PERFORMANCE			
TIA Cat 6A Channel Test			
Frequency (MHZ)	Insertion Loss	RL Min (dB)	NEXT Min (dB)
1	3.0	19.0	65.0
4	4.2	19.0	63.0
8	5.8	19.0	58.2
10	6.5	19.0	56.6
16	8.2	18.0	53.2
20	9.2	17.5	51.6
25	10.2	17.0	50.0
31.25	11.5	16.5	48.4
62.25	16.4	14.0	43.4
100	20.9	12.0	39.9
200	30.1	9.0	34.8
250	33.9	8.0	33.1
350	40.6	6.6	30.3
450	46.5	6.0	27.3
500	49.3	6.0	26.1

Frequency (MHZ)	PS NEXT Min(dB)	ELFEXT Min(dB)	PSELFEXT Min(dB)	Impedance (Ohms)
1	62.0	63.3	60.3	100±15
4	60.5	51.2	48.2	
8	55.6	45.2	42.2	
10	54.0	43.3	40.3	
16	50.6	39.2	36.2	
20	49.0	37.2	34.2	
25	47.3	35.3	32.3	
31.25	45.7	33.4	30.4	
62.25	40.6	27.3	24.3	
100	37.1	23.3	20.3	
200	31.9	17.2	14.2	
250	30.2	15.3	12.3	
350	27.3	12.4	9.4	
450	24.4	10.2	7.2	
500	23.2	9.3	6.3	