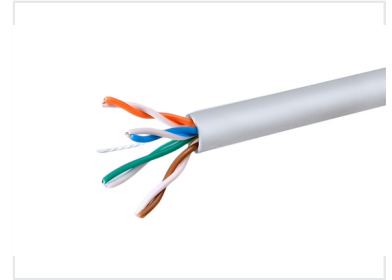


# CAT5e Ethernet Cable

This high-performance CAT5e cable is designed for Ethernet applications. It features twisted pair conductors for reduced interference and improved signal quality.



## Overview

### High-Performance CAT5e Connectivity

This CAT5e Ethernet cable is engineered for reliable data transmission in networking and telecommunications environments. Featuring high-density polyethylene insulation and robust shielding options, it effectively minimizes electromagnetic interference and crosstalk. Designed to meet international standards including UL and ISO/IEC requirements, this cable ensures stable performance for critical network infrastructure.

## Standards & Compliance

### Regulatory Compliance

UL444, UL1581, UL1666, IEC60332-1, IEC60332-3-24, EN50399, ISO/IEC11801, ANSI/TIA-568-C.2, RoHS, REACH

## Physical Construction

### Construction Details

Parameter	Specification
Conductor	Solid bare copper
Insulation Material	High density polyethylene
Shielding	Aluminum foil (total shield) + Tinned copper/Al-Mg braid
Sheath Material	PVC or LSZH (Low Smoke Halogen-Free)

### Dimensions

**0.88 mm**

Insulation Diameter (Unshielded)

**5 mm**

Sheath Diameter (Unshielded)

**6.6 mm**

Sheath Diameter (SF/UTP)

## Electrical Performance

### Key Electrical Characteristics

- Transmission speed: 69%
- Transmission delay difference: d45ns / 100m
- DC resistance: Max 9.5 $\Omega$  / 100m
- DC resistance unbalance: Max 5%
- Capacitance: Max 5.6nf / 100m

## Environmental

### Operating Temperature

-30°C to 50°C (LSZH), -20°C to 50°C (PVC)

## Mechanical Properties

### Mechanical Durability

Metric	PVC Min	LSZH Min
Tensile Strength (Before Aging)	13.5 Mpa	10.0 Mpa
Elongation (Before Aging)	150%	125%
Tensile Strength (After Aging)	12.5 Mpa	8.0 Mpa
Elongation (After Aging)	125%	100%