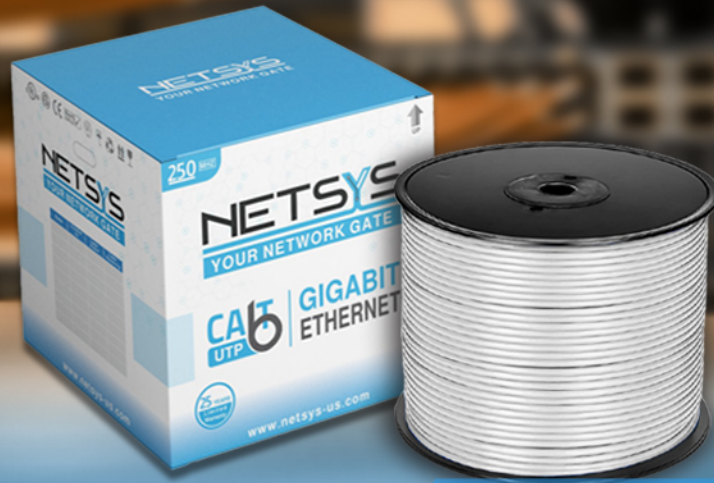


# COPPER CAT 6 CABLE

A STANDARDIZED TWISTED PAIR CABLE FOR ETHERNET AND OTHER NETWORK PHYSICAL LAYERS THAT IS BACKWARD COMPATIBLE WITH THE CATEGORY 5/5E AND CATEGORY 3 CABLE STANDARDS. CAT 6 MUST MEET MORE STRINGENT SPECIFICATIONS FOR CROSSTALK AND SYSTEM NOISE THAN CAT 5 AND CAT 5E



## ETHERNET CABLE CAT6 UTP 23AWG PVC 305M GRAY

**NS-106UTP-305GR-P**

### DESCRIPTION

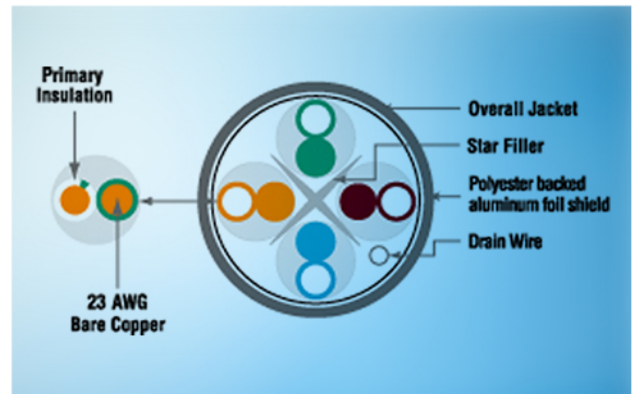
Ethernet Cable Cat6 UTP 23AWG Solid Bare Copper Wire, 250MHz, Unshielded 305M Roll PVC Gray Jacket

### FEATURES

- This cable is widely compatible with 10/100/1000-T and 10G-T Ethernet.
- RJ45 Connectors.
- Unshielded Twisted Pair.
- 1,000 ft pull box.

### STANDARD COMPLIANCES

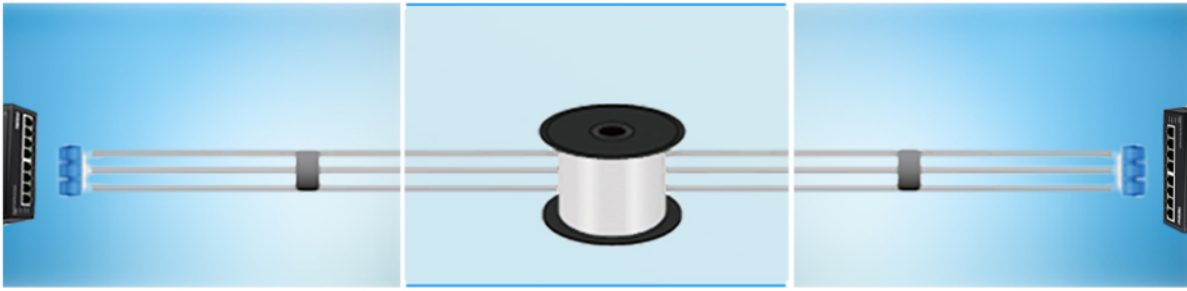
- ANSI/TIA/EIA 568 B.2-1 (Category 6).
- ANSI/TIA/EIA 862 (Building Automation).
- ISO/IEC 11801 Ed. 2.0 (Class E).
- ICEA S-102-700 (Category 6).
- UL 444.
- RoHS Compliant Directive 2002/95/EC.
- NEC/CEC Type CMP (NFPA 262) for Plenum.
- NEC/CEC Type CMR (UL 1666) for NonPlenum.



### APPLICATIONS

- IEEE 802.3: 1000 BASE-T (Gigabit Ethernet), 100 BASE-TX, 10 BASE-T.
- ANSI/TIA/EIA 854:1000 BASE-TX.
- ANSI X3.263: 100 Mb/s
- 155 Mp/s, 1.2 Gb/s ATM.
- IEEE 802.3af DTE Power (PoE).
- Digital Video.
- Broadband and Baseband Analog Video.
- Draft IEEE 802.3at for PoE Plus.

# TECHNICAL SPECIFICATION



## ELECTRICAL PROPERTIES

Reference Standard: ANSI/TIA-568.2-D

Electrical properties (20°C)

Working capacity	Capacitive Unbalance To Earth	Delay skew	Conductor Resistance	Electric Balance Of The Conductor	Insulation Resistance	Impedance
≤5.6nF/100m(@1kHz)	≤160pF/100m	≤45ns/100m	≤93.8Ω/km	≤5%(@20°C)	≥5000MΩ.km	100±22Ω

## PRODUCT STRUCTURE

### 1. Conductor

Conductor	Insulation	Insulation Diameter Ø	Insulation Colour	Seperator
0.57±0.01mm (23AWG)	PE	1.00±0.05mm	<ul style="list-style-type: none"><li>• Blue / White-Blue</li><li>• Orange / White-Orange</li><li>• Green / White-Green</li><li>• Brown / White-Brown</li></ul>	Yes

### 2. Jacket

Rip cord	Jacket	Jacket Diameter Ø	Thickness	Jacket Colour	Cable Printing
Yes	LSZH	6.2±0.4mm	0.55±0.1m	Gray	According Customer Requirement

# MECHANICAL PROPERTIES

Operating temperature	Minimum Bending radius	Jacket Elongation at break	Jacket Tensile strength
- 20~60°C	8 × Cable OD	≥100%	≥13.8Mpa

Jacket Aging conditions	Jacket Elongation at break After Aging	Jacket Tensile strength After Aging	Low temperature winding experiment
100°C 240h	≥50% Before Aging	≥85% Before Aging	-20°C 4h No visible cracks

# FREQUENCY PERFORMANCE

High Frequency Electrical performance: ( 20°C 100m)

FREQ (MHz)	ATT (≤dB)	NEXT (≤dB)	PSNEXT (≥dB)	ELFEXT (≥dB)	PS ELFEXT (≥dB)	RL (≥dB)
1.00	2.0	74.3	72.3	67.8	64.8	20.0
4.00	3.8	65.3	63.3	55.8	52.8	23.0
8.00	5.3	60.8	58.8	49.7	46.7	24.5
10.00	6.0	59.3	57.3	47.8	44.8	25.0
16.00	7.6	56.2	54.2	43.7	40.7	25.0
20.00	8.5	54.8	52.8	41.8	38.8	25.0
25.00	9.5	53.3	51.3	39.8	36.8	24.3
31.25	10.7	51.9	49.9	37.9	34.9	23.6
62.50	15.4	47.4	45.4	31.9	28.9	21.5
100.00	19.8	44.3	42.3	27.8	24.8	20.1
200.00	29.0	39.8	37.8	21.8	18.8	18.0
250.00	32.8	38.3	36.3	19.8	16.8	17.3