

60 SERIES — CAT6 F/UTP Copper Cable

Foil-Shielded Twisted-Pair (F/UTP) Structured Cabling Cable for EMI-Sensitive Environments — SKU: HEC60S

Category	CAT6 F/UTP (Shielded), 1–100 MHz, Class E
Conductor	23 AWG Solid Bare Copper
Jacket options	PE / CM / PVC / LSZH
Standards	ISO/IEC 11801, ANSI/TIA/EIA-568.2-D, IEC 61156-5, EN 50173-1
Certifications	UL-Listed, RoHS Compliant
Packaging	305m / Box

Heizka's 60 Series CAT6 cable is a foil-shielded twisted-pair (F/UTP) solution engineered for structured cabling systems that need extra protection from external electromagnetic interference (EMI). Built with 23 AWG solid bare copper conductors, an overall aluminum foil shield, and an integrated drain wire, it delivers stable Class E / CAT6 performance and 1000BASE-T Gigabit Ethernet connectivity even in electrically noisy environments.

This makes it a reliable choice for data centers, industrial plants, parking structures, and buildings with heavy EMI sources such as motors, elevators, or fluorescent ballasts. It is available with PE, CM, PVC, or LSZH jackets to match outdoor, plenum, riser, or fire-safety requirements. Every reel is manufactured and tested to ISO/IEC 11801, ANSI/TIA/EIA-568.2-D, and IEC 61156-5 standards, is UL-Listed and RoHS-compliant, and is backed by Heizka's multi-year warranty for long-term field performance.

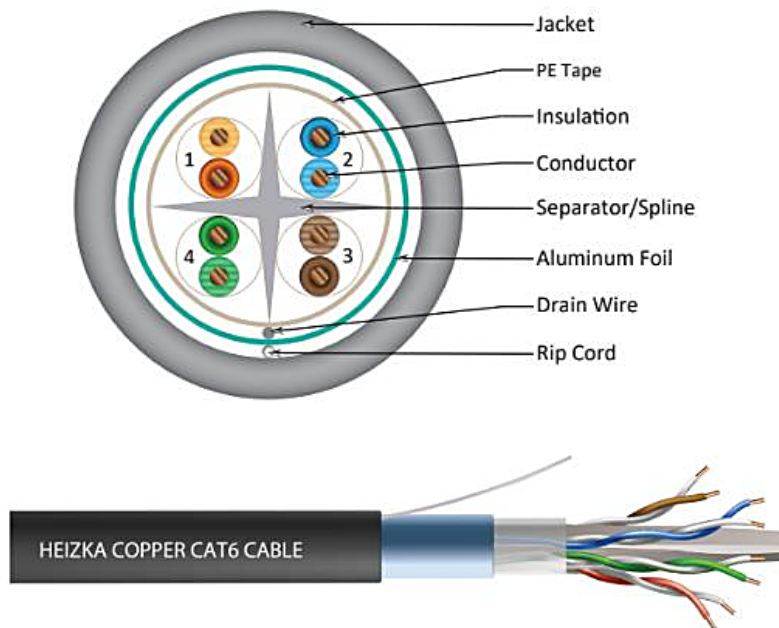
Features

- ✓ Overall Foil-Shielded Twisted-Pair (F/UTP) Construction
- ✓ Plenum fire-safety rated CMP jacket option
- ✓ 23 AWG Bare Copper Conductors
- ✓ Easy-to-see vivid-color conductor insulation and jacket
- ✓ 1000BASE-T Gigabit Ethernet, Class E / CAT6 applications
- ✓ Supports Power over Ethernet (PoE / PoE+)
- ✓ PE jacket option for waterproof, outdoor-adjacent runs
- ✓ LSZH flame-retardant jacket complies with IEC 60332-1-2 / 60332-3
- ✓ UL-Listed, RoHS-Compliant
- ✓ Designed in the USA
- ✓ Packaging: 305m / Box

Standard Compliance

- ISO/IEC 11801
- ANSI/TIA/EIA-568.2-D
- IEC 61156-5
- EN 50173-1

Cable Construction



Ordering Information

Item #	Description
HEC60S3PE	CAT6 F/UTP, PE, Black, 305m/Box
HEC60S1CM	CAT6 F/UTP, CM, Blue, 305m/Box
HEC60S1PC	CAT6 F/UTP, PVC, Blue, 305m/Box
HEC60S5LZ	CAT6 F/UTP, LSZH, Orange, 305m/Box

Technical Specifications

Construction / Dimensions

Type	F/UTP CAT6 4x2x23AWG, Shielded
Conductor structure	23 AWG, Solid Bare Copper
Insulation material	HDPE
Shield	Aluminum Foil + Drain Wire
Jacket material	PVC / LSZH / PE
Jacket diameter	7.4 ± 0.3 mm (PE) / 6.8 ± 0.2 mm (LSZH)
Installation temperature range	0°C ~ +70°C (32°F ~ 158°F)
Operating temperature range	-20°C ~ +70°C (-4°F ~ 158°F)

Electrical Characteristics

DC resistance of each conductor	≤ 9.38 Ω/100m
Operating capacitance	≤ 5.6 nF/100m
Unbalanced capacitance	≤ 330 pF/100m
Impedance (1–100 MHz)	100 Ω ± 15%
NVP	67%
Propagation delay	≤ 45 ns/100m

Mechanical Characteristics

Tensile strength	110 N
Minimum bend radius	10x max jacket diameter
Installation & storage temperature	0°C ~ +70°C (32°F ~ 158°F)
Operating temperature	-20°C ~ +70°C (-4°F ~ 158°F)

Nominal Transmission Characteristics

Measured over 100m at 20 ± 2°C

Freq (MHz)	RL Min (dB)	IL Max (dB)	DOP Max (ns)	SKEW Max (ns /100m)	NEXT Min (dB)	PSNEX T Min (dB)	ACR-F Min (dB)	PSACR-F Min (dB)
1	20	2	570	45	75	72	67.8	64.8
4	23	3.8	552	45	66	63	55.7	52.7
10	25	6	545	45	60	57	47.8	44.8
16	25	7.6	543	45	57	54	43.7	40.7
20	25	8.5	542	45	56	53	41.7	38.7
31.25	23.6	10.7	540	45	53	50	37.9	34.9
62.5	21.5	15.4	538	45	48	45	31.8	28.8
100	20.1	19.8	537	45	45.3	42.3	27.8	24.8
200	18.0	29.0	536	45	40.7	37.7	21.7	18.7
250	17.3	32.8	535	45	39	36	19.8	16.8

CAT6 U/UTP vs. CAT6 F/UTP vs. CAT6A U/UTP — Which One Do You Need?

Feature	CAT6 U/UTP (61 Series)	CAT6 F/UTP (60 Series)	CAT6A U/UTP
Item # (CM)	HEC61U1CM	HEC60S1CM	HEC6AU1CM
Construction	Unshielded	Overall foil-shielded (F/UTP)	Unshielded
Frequency	250–350 MHz	1–100 MHz (Class E)	1–500 MHz
Conductor	24 AWG	23 AWG	23 AWG
Jacket diameter	6.0 ± 0.3 mm	7.4 ± 0.3 mm	7.4 ± 0.3 mm
NVP	68%	67%	65%
Best for	Standard office LAN, cost efficiency	EMI-heavy environments, industrial, data centers	10G data centers, backbone

Packaging

Standard packaging is 305 meters per pull-box, with clear length markings printed on the jacket every meter to reduce installation waste. Boxes are palletized for damage-free freight and labeled with item code, jacket type, color, and production batch for full traceability.