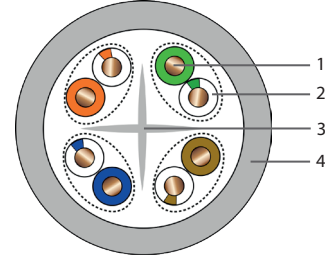
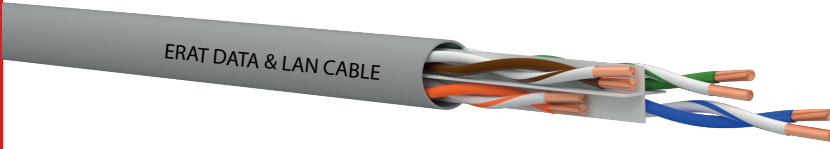


CAT 6 U-UTP 23 AWG DATA CABLE

IEC 61156-5+A1, ANSI/TIA-568-2.D, ISO/IEC 11801, EN 50173, TS EN 60332-1-2



AREAS OF USE / FEATURES	CABLE CONSTRUCTION
ERAT CAT 6 cables are designed for the transmission of digital and analog voice, data, video, and PoE signals. ERAT CAT 6 U/UTP cables support 1 Gbps data transmission with an operating bandwidth of 250 MHz. The cable is designed with a cross separator to minimize pair-to-pair interference and ensure stable transmission performance. The cables are available with LSZH, HFFR, or PVC outer jackets to meet specific customer requirements. 1000BASE-TX Gigabit Ethernet 1000BASE-T Gigabit Ethernet - ATM 155 / ATM 25 100BASE-T "Fast Ethernet" 100BASE-T2/ 100BASE-T4 100BASE-TX 10BASE-T Ethernet - ISDN, TPDDI, TP-PMD - Power Over Ethernet (PoE)	1. Copper Conductor 2. LSZH / PVC Isolated 3. Separator 4. Outer Sheath

PHYSICAL PROPERTIES	
Conductor	Pure, annealed copper
Conductor Diameter	23 AWG
Isolated	Polyolefin
Number of Isolates	8, in 4 twisted pairs
Outer Sheath	LSZH (Low Smoke Zero Halogen) flame-retardant or PVC compound
Jacket Color	Grey (RAL 7040). (Different colors can be produced upon customer request.)
Performance Guarantee	A 25-year system performance guarantee is offered when end-to-end ERAT-branded products are used.
Cable Labeling Information	Brand, Cable type, Relevant standards, Date, Serial number, Meters
CPR	Dca

MECHANICAL AND ENVIRONMENTAL PROPERTIES	
Tensile Force	50 N / mm ² max
Bending Radius (Short-Term)	4 x Cable Diameter
Bending Radius (Long-Term)	8 x Cable Diameter
Operating Temperature	-40 to +70 °C
Installation Temperature	-10 to +50 °C
Storage Temperature	-40 to +70 °C

CAT 6 U-UTP 23 AWG DATA CABLE

PACKAGING, DIMENSIONS & WEIGHT

Packaging Type	Outer Diameter (mm)	Approximate Weight (kg)
100 m Roll	6.1±0.3	4.2
305 m Box	6.1±0.3	12.8
500 m Plywood Reel	6.1±0.3	21.0
1000 m Plywood Reel	6.1±0.3	42.0

ELECTRICAL PROPERTIES

Impedance Characteristic	100±6 Ohm @ 1-250 MHz
DC Resistance	80 Ohm/km max.
Resistance Imbalance	2% max.
Effective Capacity	56 pF/m nom. @ 1 KHz
Capacitance Imbalance (to Ground)	1600 pF/km max. @ 1 KHz.
Voltage	72 Vdc max.
Dielectric Strength	1.7 kV AC / 2 seconds
Signal Speed (NVP)	Min. % 67 - 69
Signal Transmission Time (Propagation Delay)	534 + 36/f ^{1/2} nS/100m max @ 1-250 MHz
Inter-lane Signal Skew	45 nS/100m max @ 1-250 MHz
Insulation Resistance	5000 MegaOhm•km min. @ 500 Vdc

Frequency (MHz)	Return Loss (dB)	Insertion Loss (dB)	NEXT Loss (dB)	PS NEXT Loss (dB)	ACRF (dB)
	Min.	Max.	Min.	Min.	Min.
1.00	19.1	1.9	65.0	62.0	64.2
4.00	21.0	3.5	64.1	61.8	52.1
8.00	21.0	5.0	59.4	57.0	46.1
10.00	21.0	5.5	57.8	55.5	44.2
16.00	20.0	7.0	54.6	52.2	40.1
20.00	19.5	7.9	53.1	50.7	38.2
25.00	19.0	8.9	51.5	49.1	36.2
31.25	18.5	10.0	50.0	47.5	34.3
62.50	16.0	14.4	45.1	42.7	28.3
100.00	14.0	18.6	41.8	39.3	24.2
200.00	11.0	27.4	36.9	34.3	18.2
250.00	10.0	31.1	35.3	32.7	16.2

ISOLATED COLORS

							
Blue	Blue/White	Orange	Orange /White	Yellow	Yellow /White	Brown	Brown/White