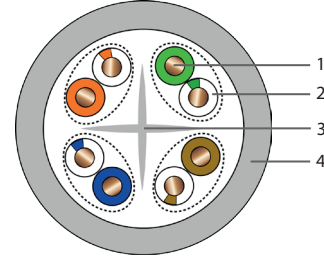


CAT 6E U-UTP 23 AWG DATA CABLE



AREAS OF USE / FEATURES	CABLE CONSTRUCTION
ERAT Cat 6E cables are used to transmit digital and analog audio, data, video, and PoE signals. ERAT Cat 6E U/UTP cables support data transmission at speeds of 1 Gbps with a bandwidth of 400 MHz. They are constructed using a separator to minimize cross-talk between the cable pairs. Production is available with either LSZH-HFFR or PVC jacketing, depending on 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

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

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PACKAGING, DIMENSIONS & WEIGHT

Packaging Type	Outer Diameter (mm)	Approximate Weight (kg)
100 m Roll	6.4±0.3	4.5
500 m Plywood Reel	6.4±0.3	22.5
1000 m Plywood Reel	6.4±0.3	45.0

ELECTRICAL PROPERTIES

Impedance Characteristic	100±6 Ohm @ 1-600 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 @ 1-600 MHz
Inter-lane Signal Skew	45 nS/100m max @ 1-600 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	19,1	1,9	65,0	62,0	64,2
4	21,0	3,5	64,1	61,8	52,1
8	21,0	5,0	59,4	57,0	46,1
10	21,0	5,5	57,8	55,5	44,2
16	20,0	7,0	54,6	52,2	40,1
20	19,5	7,9	53,1	50,7	38,2
25	19,0	8,9	51,5	49,1	36,2
31,25	18,5	10,0	50,0	47,5	34,3
62,5	16,0	14,4	45,1	42,7	28,3
100	14,0	18,6	41,8	39,3	24,2
200	11,0	27,4	36,9	34,3	18,2
250	10,0	31,1	35,3	32,7	16,2
350	8,6	37,9	32,9	30,3	13,3
400	8,0	41,1	32,0	29,3	12,1
500	7,0	47,1	30,4	27,6	10,2
600	6,2	52,7	29,0	26,3	8,6

ISOLATED COLORS

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