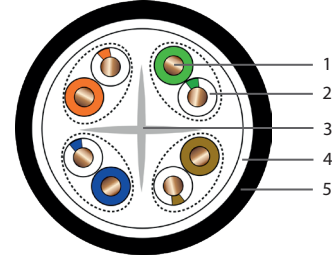
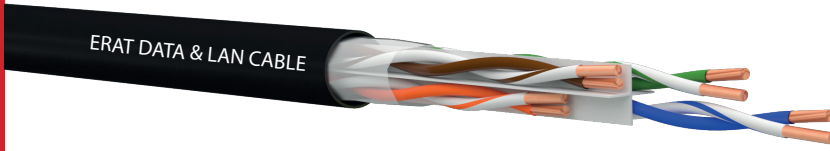


CAT 6E U-UTP 23 AWG OUTDOOR DATA CABLE



AREAS OF USE / FEATURES	CABLE CONSTRUCTION
ERAT CAT 6E outdoor cables, featuring UV resistance and a black PE outer sheath, are suitable for harsh conditions in external applications. They are used for transmitting digital and analog audio, data, video, and PoE signals. ERAT CAT 6E U/UTP cables are designed to transmit data at speeds of 1 Gbps with a bandwidth of 250 MHz. Outer sheaths made of HFFR or other materials can be manufactured according to 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. PE Isolated 3. Separator 4. Polyester Tape 5. Outer Sheath

PHYSICAL PROPERTIES	
Conductor	Pure, annealed copper
Conductor Diameter	23 AWG
Isolated	Polyolefin
Number of Isolates	8, in 4 twisted pairs
Polyester Tape Wrap	Polyester tape provides 100% coverage.
Outer Sheath	UV-resistant and weather-resistant PE compound suitable for outdoor installation.
Jacket Color	Black. (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	60 N / mm ² max
Bending Radius (Short-Term)	4 x Cable Diameter
Bending Radius (Long-Term)	8 x Cable Diameter
Operating Temperature	-40 to +80 °C
Installation Temperature	-10 to +60 °C
Storage Temperature	-40 to +80 °C

CAT 6E U-UTP 23 AWG OUTDOOR DATA CABLE

PACKAGING, DIMENSIONS & WEIGHT

Packaging Type	Outer Diameter (mm)	Approximate Weight (kg)
100 m Roll	6.4±0.3	5
500 m Plywood Reel	6.4±0.3	20.0
1000 m Plywood Reel	6.4±0.3	40.0

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	35 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