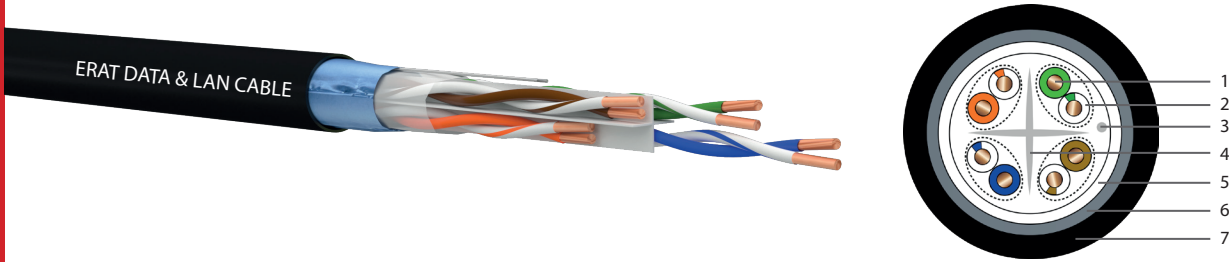


CAT 6 F-UTP 23 AWG OUTDOOR DATA CABLE



AREAS OF USE / FEATURES		CABLE CONSTRUCTION
ERAT CAT 6 outdoor cables, featuring a black UV-resistant PE outer sheath, are suitable for demanding external applications. They are used for the transmission of digital and analog audio, data, video, and PoE signals. ERAT CAT 6 F/UTP cables are designed to transmit data at speeds of 1 Gbps with a bandwidth of 250 MHz. They feature an internal separator to minimize crosstalk between the cable pairs. Outer sheaths can be manufactured using HFFR or other specifications based 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. PE Isolated 3. Grounding Wire 4. Separator 5. Polyester Tape 6. Aluminum Foil 7. 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.	
Grounding Wire	Solid, tinned annealed copper	
Internal Shielding	Laminated aluminum foil providing 100% opacity (foil side facing inwards)	
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 6 F-UTP 23 AWG OUTDOOR DATA CABLE

PACKAGING, DIMENSIONS & WEIGHT

Packaging Type	Outer Diameter (mm)	Approximate Weight (kg)
500 m Plywood Reel	7.4±0.3	23
1000 m Plywood Reel	7.4±0.3	46

ELECTRICAL PROPERTIES

Impedance Characteristic	100±6 Ohm @ 1-250 MHz
DC Resistance	82 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
Joint Attenuation	55 dB min @ 30-100 MHz 55-20Log(f/100) @100-250 MHz
Transfer Impedance	10 mOhm/m max @ 1-10 MHz 30 mOhm/m max @ 30 MHz

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