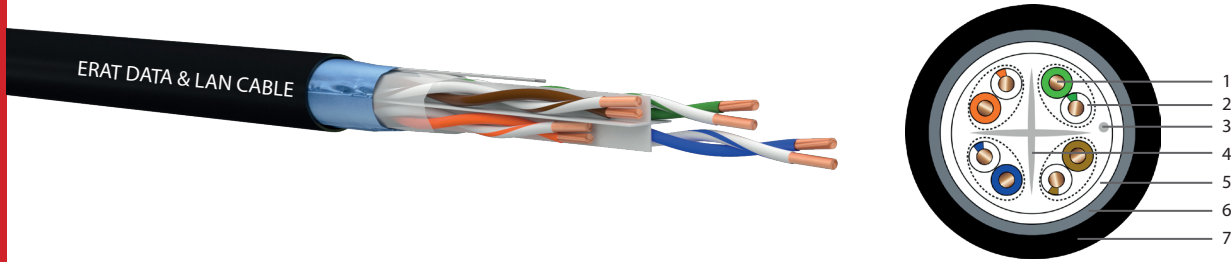


CAT 6A F-UTP 23 AWG OUTDOOR DATA CABLE



AREAS OF USE / FEATURES	CABLE CONSTRUCTION
ERAT CAT 6A outdoor cables, featuring UV resistance and a black PE outer sheath, are suitable for demanding external applications. They are used for transmitting digital and analog audio, data, video, and PoE signals. ERAT CAT 6A F/UTP cables support data transmission speeds of 10 Gbps at 500 MHz. They are constructed with a separator to minimize crosstalk between the cable pairs. Outer sheaths can be manufactured using HFFR or other specifications based on customer requirements. 10000BASE-TX Gigabit Ethernet 10000BASE-T Gigabit Ethernet 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
Grounding Wire	Solid, tinned annealed copper
Polyester Tape Wrap	Polyester tape provides 100% coverage.
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 (Additional color options are available 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

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PACKAGING, DIMENSIONS & WEIGHT

Packaging Type	Outer Diameter (mm)	Approximate Weight (kg)
500 m Plywood Reel	7.4±0.3	23.5
1000 m Plywood Reel	7.4±0.3	46.4

ELECTRICAL PROPERTIES

Impedance Characteristic	100±6 Ohm @ 1-500 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. %78 - 80
Inter-lane Signal Skew	45 nS/100m max @ 1-500 MHz
Insulation Resistance	5000 MegaOhm·km min. @ 500 Vdc
Joint Attenuation	55 dB min @ 30-100 MHz 55-20Log(f/100) @100-500 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	7.8	53.1	50.7	38.2
25.00	19.0	8.8	51.5	49.1	36.2
31.25	18.5	9.8	50.0	47.5	34.3
62.50	16.0	14.0	45.1	42.7	28.3
100.00	14.0	18.0	41.8	39.3	24.2
200.00	11.0	26.1	36.9	34.3	18.2
250.00	10.0	29.5	35.3	32.7	16.2
300.00	9.2	32.7	34.0	31.4	14.6
400.00	8.0	38.4	29.9	27.1	12.1
500.00	8.0	43.8	26.7	23.8	10.2

ISOLATED COLORS

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