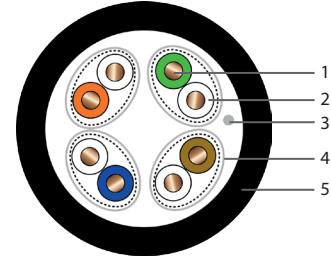


CAT 6 U-FTP 23 AWG OUTDOOR DATA CABLE



AREAS OF USE / FEATURES		CABLE CONSTRUCTION
ERAT CAT 6 outdoor cables, featuring UV-resistant black PE outer jackets, are suitable for harsh conditions in external applications. They are used for transmitting digital and analog audio, data, video, and PoE signals. ERAT CAT 6 U/FTP cables are designed for data transmission at speeds of 1 Gbps with a 250 MHz bandwidth. Outer jackets 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		1. Copper Conductor 2. PE Isolated 3. Grounding Wire 4. Aluminum Foil 5. 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	
Individual Pair Shield	Laminated aluminum foil providing 100% coverage (foil side facing outwards)	
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 U-FTP 23 AWG OUTDOOR DATA CABLE

PACKAGING, DIMENSIONS & WEIGHT

Packaging Type	Outer Diameter (mm)	Approximate Weight (kg)
500 m Plywood Reel	7.2±0.3	21.5
1000 m Plywood Reel	7.2±0.3	43

ELECTRICAL PROPERTIES

Impedance Characteristic	100±6 Ohm @ 1-250 MHz
DC Resistance	80 Ohm/km max.
Resistance Imbalance	2% max.
Effective Capacity	45 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
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	White	Orange	White	Yellow	White	Brown	White