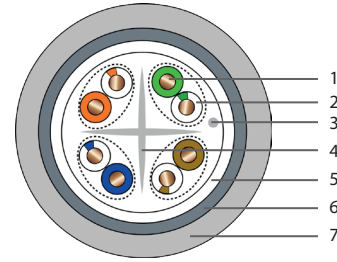
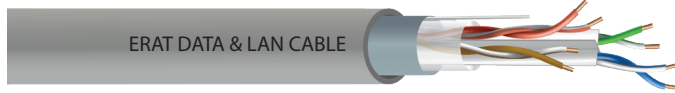


CAT 6 F-UTP 24 AWG DATA CABLE



WHERE IT IS USED/ FEATURES	CABLE STRUCTURE
ERAT CAT 6 cables are used to carry digital and analog voice, data and video, POE signals ERAT CAT 6 F/UTP cables are a type of cable that carries data at 250 MHz 1 Gbps/sec. The cable is sheathed using a Separator to minimize the interaction between the pairs. Production is made with LSZH-HFFR and PVC sheath according to customer demands. • 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 Insulation 3. Ground Wire 4. Separator 5. Polyester Tape 6. Aluminium Foil 7. Outer Jacket

PHYSICAL PROPERTIES	
Conductive	Solid, annealed copper
Conductor Diameter	24 AWG
Insulation	Polyolefin
Number of Insulated Conductors	8, twisted in 4 pairs
Polyester Tape Wrap	Polyester Tape provides 100% coverage
Ground Wire	Solid, tin-coated annealed copper
Overall Inner Shield	Laminated aluminum foil providing 100% coverage (foil face is introverted)
Outer Jacket	LSZH (Low Smoke Zero Halogen) flame retardant or PVC component
Jacket Color	Gray. (Ral 7040) (Different colors can be produced according to customer demand.)
Cable information the text	Brand, Type of cable, Relevant standards, Date, Serial number, Meter

MECHANICAL AND ENVIRONMENTAL PROPERTIES	
Pulling 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

CAT 6 F-UTP 24 AWG DATA CABLE

PACKAGING & SIZE & WEIGHT		
Packaging Type	Outer Diameter (mm)	Approximate Weight (kg)
500 m Plywood Reel	7.2±0.3	25
1000 m Plywood Reel	7.2±0.3	50

ELECTRICAL SPECIFICATIONS	
Characteristic Impedance	100±6 Ohm @ 1-250 MHz
DC Resistance	93 Ohm/km max.
Resistance Unbalance	2% max.
Capacitance	56 pF/m nom. @ 1 KHz
Capacity Imbalance (Wire to ground)	1600 pF/km max. @ 1 KHz.
Voltage	72 Vdc max.
Dielectric Strength	1.7 kV a.c. / 2 seconds
Velocity of Propagation (NVP)	Min. % 67 - 69
The Signal Transmission Time (Prop. Delay)	534 + 36/f ^{1/2} nS/100m max @ 1-250 MHz
Propagation Delay Skew	45 nS/100m max @ 1-250 MHz
Insulation Resistance	5000 MegaOhm•km min. @ 500 Vdc
Coupling 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

INSULATION COLORS							
							
Blue	Blue/White	Orange	Orange /White	Green	Green /White	Brown	Brown/White