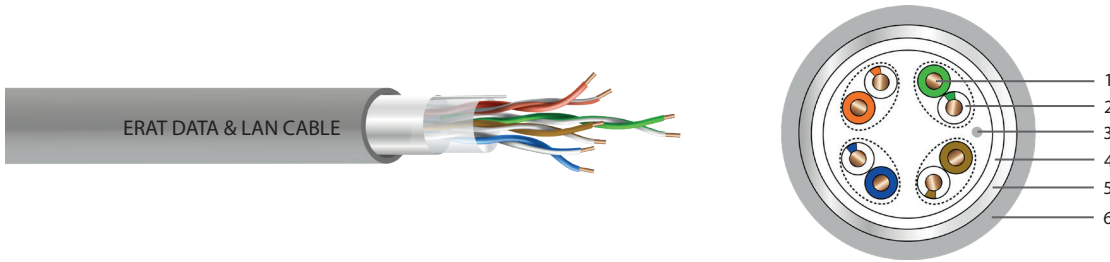


CAT 5E F-UTP 24 AWG DATA CABLE



| WHERE IT IS USED/ FEATURES | CABLE STRUCTURE |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>All Category 5E cables are widely used in Network systems.</p> <p>ERAT CAT 5E F/UTP cables are a type of cable carrying 100Mbit/s data at a speed of 100 MHz. CAT 5E cables provide high data throughput and are less affected by foreign signals. According to customer demands, production is carried out with LSZH-HFFR and PVC sheaths.</p> <ul style="list-style-type: none"> • 10BASE-T Ethernet • ISDN, TPDDI, TP-PMD • Power Over Ethernet (PoE) • 100BASE-T "Fast Ethernet" • 100BASE-T2/ 100BASE-T4 • 100BASE-TX | <ol style="list-style-type: none"> 1. Copper Conductor 2. PE Insulation 3. Ground Wire 4. Polyester Tape 5. Aluminium Foil 6. 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 5E F-UTP 24 AWG DATA CABLE

| PACKAGING & SIZE & WEIGHT | | |
|---------------------------|---------------------|-------------------------|
| Packaging Type | Outer Diameter (mm) | Approximate Weight (kg) |
| 500 m Plywood Reel | 6.0±0.3 | 21.8 |
| 1000 m Plywood Reel | 6.0±0.3 | 43.2 |

| ELECTRICAL SPECIFICATIONS | |
|-------------------------------------|----------------------------------------|
| Characteristic Impedance | 100±6 Ohm @ 1-100 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 |
| Insulation Resistance | 5000 MegaOhm·km min. @ 500 Vdc |
| Coupling attenuation | 55 dB min @ 30-100 MHz 55-20Log(f/100) |
| Transfer Impedance | 50 mOhm/m max. @ 1-30 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 | 19.0 | 2.1 | 60.0 | 57.0 | 58.6 |
| 4.00 | 19.0 | 3.9 | 54.8 | 51.8 | 46.6 |
| 8.00 | 19.0 | 5.5 | 50.0 | 47.0 | 40.6 |
| 10.00 | 19.0 | 6.2 | 48.5 | 45.5 | 38.6 |
| 16.00 | 19.0 | 7.9 | 45.2 | 42.2 | 34.5 |
| 20.00 | 19.0 | 8.9 | 43.7 | 40.7 | 32.6 |
| 25.00 | 18.0 | 10.0 | 42.1 | 39.1 | 30.7 |
| 31.25 | 17.1 | 11.2 | 40.5 | 37.5 | 28.7 |
| 62.50 | 14.1 | 16.2 | 35.7 | 32.7 | 22.7 |
| 100.00 | 12.0 | 21.0 | 32.3 | 29.3 | 18.6 |

| ISOLATED COLORS | | | | | | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |
| Blue | Blue/White | Orange | Orange /White | Green | Green /White | Brown | Brown/White |