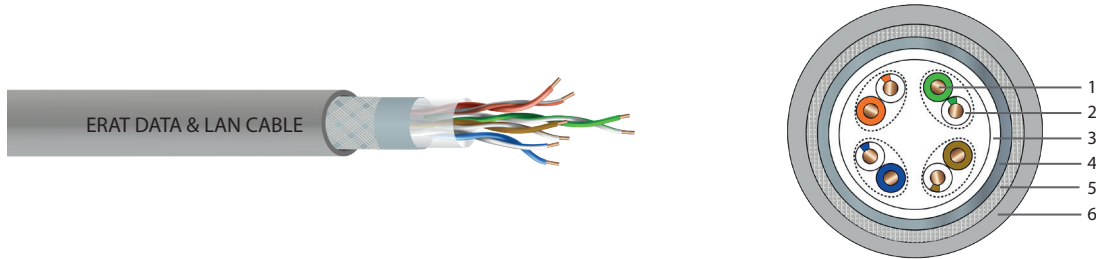


## CAT 5E SF-UTP 24 AWG DATA CABLE



| WHERE IT IS USED/ FEATURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | CABLE STRUCTURE                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>All Category 5E cables are widely used in Network systems.</p> <p>CAT 5E SF/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.demands.</p> <ul style="list-style-type: none"> <li>• 10BASE-T Ethernet</li> <li>• ISDN, TPDDI, TP-PMD</li> <li>• Power Over Ethernet (PoE)</li> <li>• 100BASE-T "Fast Ethernet"</li> <li>• 100BASE-T2/ 100BASE-T4</li> <li>• 100BASE-TX</li> </ul> | <ol style="list-style-type: none"> <li>1. Copper Conductor</li> <li>2. PE Insulation</li> <li>3. Polyester Tape</li> <li>4. Aluminium Foil</li> <li>5. Tinned Copper Braid</li> <li>6. Outer Jacket</li> </ol> |

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

| MECHANICAL AND ENVIRONMENTAL PROPERTIES |                            |
|-----------------------------------------|----------------------------|
| <b>Pulling Force</b>                    | 50 N / mm <sup>2</sup> max |
| <b>Bending Radius (Short Term)</b>      | 4 x Cable Diameter         |
| <b>Bending Radius (Long Term)</b>       | 8 x Cable Diameter         |
| <b>Operating Temperature</b>            | -40 to +70 °C              |
| <b>Installation Temperature</b>         | -10 to +50 °C              |
| <b>Storage Temperature</b>              | -40 to +70 °C              |

## CAT 5E SF-UTP 24 AWG DATA CABLE

| PACKAGING & SIZE & WEIGHT |                     |                         |
|---------------------------|---------------------|-------------------------|
| Packaging Type            | Outer Diameter (mm) | Approximate Weight (kg) |
| 500 m Plywood Reel        | 6.4±0.3             | 24.8                    |
| 1000 m Plywood Reel       | 6.4±0.3             | 49.2                    |

| 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                  | 30 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                                                                           |