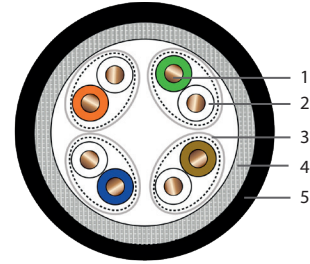
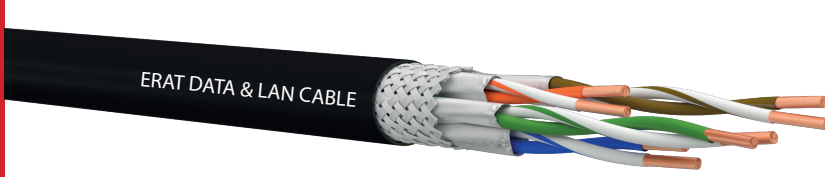


## CAT 7 S-TP 23 AWG 600 MHZ OUTDOOR DATA CABLE



| AREAS OF USE / FEATURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | CABLE CONSTRUCTION                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>ERAT CAT 7 Outdoor cables are designed for outdoor installations and harsh environmental conditions. Featuring a UV-resistant black PE outer jacket, they are suitable for outdoor applications and are used for the transmission of digital and analog voice, data, video, and PoE signals.</p> <p>ERAT CAT 7 S/FTP cables support data transmission rates of up to 10,000 Mbps with an operating bandwidth of 600 MHz. Upon customer request, the cables can be manufactured with HFFR or other types of outer jacket materials.</p> <ul style="list-style-type: none"> <li>• 10000BASE-TX Gigabit Ethernet</li> <li>• 10000BASE-T Gigabit Ethernet</li> <li>• 1000BASE-TX Gigabit Ethernet</li> <li>• 1000BASE-T Gigabit Ethernet</li> <li>• ATM 155 / ATM 25</li> <li>• 100BASE-T "Fast Ethernet"</li> <li>• 100BASE-T2/ 100BASE-T4</li> <li>• 100BASE-TX</li> <li>• 10BASE-T Ethernet</li> <li>• ISDN, TPDDI, TP-PMD</li> <li>• Power Over Ethernet (PoE)</li> </ul> | <ol style="list-style-type: none"> <li>1. Copper Conductor</li> <li>2. PE Isolated</li> <li>3. Aluminum Foil</li> <li>4. Tinned Copper Braid</li> <li>5. Outer Sheath</li> </ol> |

| PHYSICAL PROPERTIES               |                                                                                                   |
|-----------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Conductor</b>                  | Pure, annealed copper                                                                             |
| <b>Conductor Diameter</b>         | 23 AWG                                                                                            |
| <b>Isolated</b>                   | Polyolefin                                                                                        |
| <b>Number of Isolates</b>         | 8, in 4 twisted pairs                                                                             |
| <b>Internal Shielding</b>         | Laminated aluminum foil providing 100% opacity (foil side facing outwards)                        |
| <b>External Shielding</b>         | Tinned Copper Braid                                                                               |
| <b>Outer Sheath</b>               | UV-resistant and weather-resistant PE compound suitable for outdoor installation.                 |
| <b>Jacket Color</b>               | Black. (Different colors can be produced upon customer request.)                                  |
| <b>Performance Guarantee</b>      | A 25-year system performance guarantee is offered when end-to-end ERAT-branded products are used. |
| <b>Cable Labeling Information</b> | Brand, Cable type, Relevant standards, Date, Serial number, Meters                                |

| MECHANICAL AND ENVIRONMENTAL PROPERTIES |                            |
|-----------------------------------------|----------------------------|
| <b>Tensile Force</b>                    | 60 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 +80 °C              |
| <b>Installation Temperature</b>         | -10 to +60 °C              |
| <b>Storage Temperature</b>              | -40 to +80 °C              |

## CAT 7 S-FTP 23 AWG 600 MHZ OUTDOOR DATA CABLE

### PACKAGING, DIMENSIONS & WEIGHT

| Packaging Type      | Outer Diameter (mm) | Approximate Weight (kg) |
|---------------------|---------------------|-------------------------|
| 500 m Plywood Reel  | 7.4±0.3             | 26.3                    |
| 1000 m Plywood Reel | 7.4±0.3             | 52.2                    |

### ELECTRICAL PROPERTIES

|                                              |                                                     |
|----------------------------------------------|-----------------------------------------------------|
| Impedance Characteristic                     | 100±6 Ohm @ 1-600 MHz                               |
| DC Resistance                                | 76 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                          | 1500 Volts / 1 minute min. RMS                      |
| Signal Speed (NVP)                           | Min. %77 - 80                                       |
| Signal Transmission Time (Propagation Delay) | 534 + 36/f <sup>1/2</sup> @ 1-600 MHz               |
| Inter-lane Signal Skew                       | 25 nS/100m max @ 1-600 MHz                          |
| Insulation Resistance                        | 5000 MegaOhm•km min. @ 500 Vdc                      |
| Joint Attenuation                            | 55 dB min @ 30-100 MHz 55-20Log(f/100) @100-600 MHz |
| Transfer Impedance                           | 10 mOhm/m max @ 1-30 MHz 30 MOhm/m max @ 30-100 MHz |

| Frequency (MHz) | Return Loss (dB) | Insertion Loss (dB/100m) | NEXT Loss (dB) | PS NEXT Loss (dB) | PS ELFEXT (dB/100m) |
|-----------------|------------------|--------------------------|----------------|-------------------|---------------------|
| 1               | 20,0             | 2,0                      | 78,0           | 75,0              | -                   |
| 4               | 23,0             | 3,7                      | 78,0           | 75,0              | 75,0                |
| 8               | 24,5             | 5,2                      | 78,0           | 75,0              | 72,9                |
| 10              | 25,0             | 5,9                      | 78,0           | 75,0              | 71,0                |
| 16              | 25,0             | 7,4                      | 78,0           | 75,0              | 66,9                |
| 20              | 25,0             | 8,3                      | 78,0           | 75,0              | 65,0                |
| 25              | 24,3             | 9,3                      | 78,0           | 75,0              | 63,0                |
| 31,25           | 23,6             | 10,4                     | 78,0           | 75,0              | 61,1                |
| 62,5            | 21,5             | 14,9                     | 75,5           | 72,5              | 55,1                |
| 100             | 20,1             | 19,0                     | 72,4           | 69,4              | 51,0                |
| 200             | 18,0             | 27,5                     | 67,9           | 64,9              | 45,0                |
| 250             | 17,3             | 31,0                     | 66,4           | 63,4              | 43,0                |
| 300             | 17,3             | 34,2                     | 65,2           | 62,2              | 41,5                |
| 400             | 17,3             | 40,0                     | 63,4           | 60,4              | 39,0                |
| 500             | 17,3             | 45,3                     | 61,9           | 58,9              | 37,0                |
| 600             | 17,3             | 50,1                     | 60,7           | 57,7              | 35,4                |

### ISOLATED COLORS

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |
| Blue                                                                                | White                                                                               | Orange                                                                              | White                                                                               | Yellow                                                                              | White                                                                                 | Brown                                                                                 | White                                                                                 |