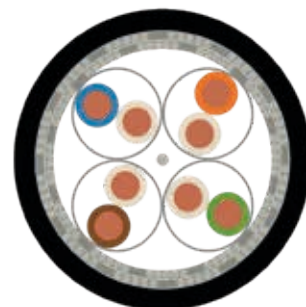


# Data Lan Cables

## CAT 6A S/FTP PE CPR Fca



### APPLICATION

- ISDN
- 4/6 Mbps Token Ring (IEEE 802.5)
- 100 Mbps CDDI
- 250 Mbps ATM Power over Ethernet (PoE)
- 10 BASE-T Ethernet (IEEE 802.3j)
- 100 BASE-VG AnyLAN (IEEE 802.12)
- 1000 BASE-T 1 Gigabit Ethernet (IEEE 802.3 ab)
- 10 GBASE-T 10 Gigabit Ethernet (IEEE 802.3 an)
- Electromagnetic compatibility (EMC)

### CABLE CONSTRUCTION

- 1) Conductor : Electrolytic solid copper conductor
- 2) Insulation : Foamed polyethylene clad with solid polyethylene
- 3) Indv. Stranding : Insulations are stranded into pairs
- 4) Indv. Screen : Al/PET tape
- 5) Screen Wire : A tinned copper earthing wire between screened pairs
- 6) Ovr. Stranding : In layers
- 7) Ovr. Screen : Tinned copper braiding
- 8) Outer Jacket : UV resistant, halogen-free outer jacket, RAL 7035 (Grey)

### TECHNICAL CHARACTERISTICS

| Conductor Resistance<br>$\Omega/\text{km}(20^\circ\text{C})$ | Insulation Resistance<br>$\text{M}\Omega/\text{km}(20^\circ\text{C})$ | Mutual Capacitance<br>$\text{nF}/\text{km}$ | Resistance Unbalance | Propagation Velocity | Characteristic Impedance $\Omega$<br>(1-250 MHz) | Operating Voltage<br>V DC | Test Voltage V<br>(DC. 1 minute) |
|--------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------|----------------------|----------------------|--------------------------------------------------|---------------------------|----------------------------------|
| Max. 94                                                      | 5000                                                                  | Max. 56                                     | %2                   | %78-80               | 100 $\pm$ %15                                    | 150                       | 1200                             |

### MECHANICAL CHARACTERISTICS

| Bending Radius | Temperature Range Operating |
|----------------|-----------------------------|
| 8.0xD mm       | -20°C ~ +60°C               |

### STANDARDS

#### Manufacturing

ANSI/TIA-568-C.2,  
IEC-61156-5,  
IEC-11801

# Data Lan Cables

## CAT 6A S/FTP PE CPR Fca

### ELECTRICAL PROPERTIES

| Frequency<br>MHz | Insertion Los<br>dB/100m (Max.) | Near-end<br>Crosstalk<br>(NEXT)<br>dB (Min.) | Power-sum<br>Near-end<br>Crosstalk<br>(PSNEXT)<br>dB<br>(Min.) | Equal-level<br>Far-end<br>Crosstalk<br>(ELFEXT)<br>dB/100m<br>(Min.) | Power-sum<br>Equal Level<br>Far-end<br>Crosstalk<br>(PSELFEXT)<br>dB/100m(Min.) | Return<br>Loss (RL)<br>dB<br>(Min.) |
|------------------|---------------------------------|----------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------|
| 1                | 2                               | 74.3                                         | 72.3                                                           | 67.8                                                                 | 64.8                                                                            | 20                                  |
| 4                | 3.8                             | 65.3                                         | 63.3                                                           | 55.8                                                                 | 52.8                                                                            | 23                                  |
| 8                | 5.3                             | 60.8                                         | 58.8                                                           | 49.7                                                                 | 46.7                                                                            | 24.5                                |
| 10               | 6                               | 59.3                                         | 57.3                                                           | 47.8                                                                 | 44.8                                                                            | 25                                  |
| 16               | 7.6                             | 56.2                                         | 54.2                                                           | 43.7                                                                 | 40.7                                                                            | 25                                  |
| 20               | 8.5                             | 54.8                                         | 52.8                                                           | 41.8                                                                 | 38.8                                                                            | 24.3                                |
| 25               | 9.5                             | 53.3                                         | 51.3                                                           | 39.8                                                                 | 36.8                                                                            | 23.6                                |
| 31,25            | 10.7                            | 51.9                                         | 49.9                                                           | 37.9                                                                 | 34.9                                                                            | 21.5                                |
| 62,5             | 15.4                            | 47.4                                         | 45.4                                                           | 31.9                                                                 | 28.9                                                                            | 20.1                                |
| 100              | 19.8                            | 44.3                                         | 42.3                                                           | 27.8                                                                 | 24.8                                                                            | 18                                  |
| 200              | 29                              | 39.8                                         | 37.8                                                           | 21.8                                                                 | 18.8                                                                            | 17.3                                |
| 250              | 32.8                            | 38.3                                         | 36.3                                                           | 19.8                                                                 | 16.8                                                                            | 16.8                                |
| 300              | 34.3                            | 37.1                                         | 35.1                                                           | 18.3                                                                 | 15.3                                                                            | 16.8                                |
| 400              | 40.1                            | 35.3                                         | 33.3                                                           | 15.8                                                                 | 12.8                                                                            | 15.9                                |
| 500              | 45.3                            | 33.8                                         | 31.8                                                           | 13.8                                                                 | 10.8                                                                            | 15.2                                |

### CAT 6A S/FTP PE CPR FCA

| Part Number    | Pair<br>Count | Conductor<br>Diameter (AWG) | Approx. Cable<br>Diameter(mm) | Copper<br>Weight(kg/km) | Approx.<br>Weight(kg/km) | Packing<br>Lengths(m) |
|----------------|---------------|-----------------------------|-------------------------------|-------------------------|--------------------------|-----------------------|
| S/FTP-CAT6A-PE | 4             | 23                          | 7.2                           | 25.9                    | 50                       | 500/1000              |