

# 1161A Series Category 3



## Product Description

The 1161A Series Central Office (CO) Cables are designed for use between switching and transmission equipment, spanning distances up to 565 feet. With short twist lays, 1161A series offers superior crosstalk performance over standard telephone cable. It is manufactured with a foil shield for Electromagnetic Interference (EMI) reduction. The 1161A series meets or exceeds all applicable requirements of Telcordia GR-137 specifications.

## Applications

- T1/DS1
- T1C/DS1C
- DS2

## Specifications

|                        |   |
|------------------------|---|
| Conductor              | Tinned copper   |
| Insulation             | Polyolefin  |
| Core Wrap              | Non-hygroscopic, dielectric tape (16+ pair counts only)   |
| Shield                 | Aluminum foil   |
| Jacket                 | Gray PVC printed at 2 foot intervals including product identification, pair count, UL information and sequential lengths in feet and meters   |
| Performance Compliance | Telcordia GR-137-CORE, Issue 2, May 2013<br>Telcordia GR-499-CORE (Pulse shape compliance at 565 feet)<br>ASTM B33 - Tinned Copper<br>UL 444<br>CSA C22.2 No. 214-08<br>UL 1666<br>ANSI/TIA-568-C.2<br>RoHS-compliant |
| NRTL Programs          | UL, c(UL) Listed CMR  |

## Features

- 24 AWG tinned copper conductors
- Solid color Polyolefin insulation
- 100 Ohm nominal Impedance
- Short pair lays/tight twists
- Aluminum foil shield
- Tinned copper drain wire
- CMR listed
- 75°C rating
- Rip cord

## Benefits

- Small diameter and light weight results in smaller bundles of cables and improved flexibility (compared with 600 Series)
- Tinned copper conductors minimize change in wire-wrap joint resistance
- Greater crush resistance and improved transmission characteristics
- Impedance mismatch with OSP cable is minimized
- Improved crosstalk performance and pair identification
- EMI isolation
- Easier termination and superior grounding
- Suitable for horizontal and riser installations
- Wider operating temperature range
- Added ease of jacket removal

## Part Numbers and Physical Characteristics

| Part Number | Pair Count | AWG (mm) | Nominal Diameter in (mm) | Approx. Weight lbs/kft (kg/km) | Standard Length ft (m) | Package |
|-------------|------------|----------|--------------------------|--------------------------------|------------------------|---------|
| 155-299-21  | 4          | 24 (0.5) | 0.26 (6.6)               | 27 (40)                        | 10,000 (3,048)         | Reel    |
| 155-399-21  | 6          | 24 (0.5) | 0.27 (6.9)               | 35 (52)                        | 10,000 (3,048)         | Reel    |
| 155-F99-21  | 8          | 24 (0.5) | 0.35 (8.9)               | 45 (67)                        | 10,000 (3,048)         | Reel    |
| 155-499-21  | 12         | 24 (0.5) | 0.35 (8.9)               | 58 (86)                        | 7,000 (2,133)          | Reel    |
| 155-L99-21  | 14         | 24 (0.5) | 0.38 (9.7)               | 70 (104)                       | 7,000 (2,133)          | Reel    |
| 155-599-21* | 16         | 24 (0.5) | 0.41 (10)                | 77 (115)                       | 7,000 (2,133)          | Reel    |
| 155-699-21* | 20         | 24 (0.5) | 0.44 (11)                | 93 (139)                       | 20,000 (6,096)         | Reel    |
| 155-799-21* | 25         | 24 (0.5) | 0.48 (12)                | 112 (167)                      | 5,000 (1,524)          | Reel    |
| 155-899-21* | 28         | 24 (0.5) | 0.51 (13)                | 123 (183)                      | 5,000 (1,524)          | Reel    |
| 155-999-21* | 30         | 24 (0.5) | 0.53 (14)                | 135 (201)                      | 5,000 (1,524)          | Reel    |
| 155-A99-21* | 32         | 24 (0.5) | 0.55 (14)                | 143 (213)                      | 4,000 (1,219)          | Reel    |
| 155-B99-21* | 50         | 24 (0.5) | 0.66 (17)                | 210 (313)                      | 3,000 (914)            | Reel    |
| 155-E99-21* | 100        | 24 (0.5) | 0.89 (23)                | 389 (579)                      | 1,000 (305)            | Reel    |

\*Mylar around core

## Electrical Specifications

| Frequency MHz | PSNEXT Mean |            | PSNEXT Worst Pair |            |
|---------------|-------------|------------|-------------------|------------|
|               | Minimum dB  | Typical dB | Minimum dB        | Typical dB |
| 0.15          | 58          | 66         | 53                | 60         |
| 0.772         | 47          | 53         | 42                | 48         |
| 1.6           | 43          | 47         | 38                | 43         |
| 3.15          | 38          | 42         | 33                | 37         |
| 6.3           | 34          | 38         | 29                | 32         |

| Bit Rate Mb/s | Frequency MHz | Attenuation @ 68°F (20°C)          |                           | Maximum Individual Conductor DC Resistance @ 68°F (20°C) Ohms/kft (Ohms/km) | Nominal Mutual Capacitance pF/ft (pF/m) | Characteristic Impedance @ 0.772 MHz Ohms |
|---------------|---------------|------------------------------------|---------------------------|---|---|---|
|               |               | Maximum Average* dB/kft (dB/100 m) | Typical dB/kft (dB/100 m) |   |   |   |
| 1.544         | 0.772         | 6.3 (2.1)                          | 5.4 (1.8)                 | 28.6 (93.8)   | 16 (52)                                 | 102 ± 15.3                                |