# Detailed Specifications & Technical Data

**METRIC MEASUREMENT VERSION**

## 7951A Composite - Composite Data, Audio, Video, Security and Control Cable

For more Information please call

1-800-Belden1

## General Description:

Composite - (1)Cat 5 4-pair, 24 AWG unshielded plus (4) 18 AWG stranded (19x30) bare copper conductors, polyolefin Insulation on the pairs; PVC insulation on the conductors, overall F-R PVC jacket. Jacket sequentially marked.

## Usage (Overall)

**Suitable Applications:** Keypads, Control Panels, Touch Panel Controls, Home Theater, A/V Equipment, Projectors, Screens, Window Treatments, Lighting, Security, Security Cameras, Home Automation, Energy Control

## Twisted Pair

### Physical Characteristics

#### Conductor

**AWG:**

| # Pairs | AWG | Stranding | Conductor Material | Dia. (mm) |
|---|---|---|---|---|
| 4 | 24 | Solid | BC - Bare Copper | 0.508 |

#### Insulation

**Insulation Material:**

| Insulation Material | Dia. (mm) |
|---|---|
| PO - Polyolefin | 0.914 |

**Twisted Pair Color Code Chart:**

| Number | Color |
|---|---|
| 1 | White/Blue Stripe and Blue |
| 2 | White/Orange Stripe and Orange |
| 3 | White/Green Stripe and Green |
| 4 | White/Brown Stripe and Brown |

#### Individual Shield

#### Outer Jacket

**Outer Jacket Material:**

| Outer Jacket Material |
|---|
| PVC - Polyvinyl Chloride |

**Outer Jacket Diameter:**

| Nom. Dia. (mm) |
|---|
| 4.953 |

**Outer Jacket Ripcord:** Yes

**Outer Jacket Color Code Chart:**

| Color |
|---|
| Lt Green |

### Electrical Characteristics

**Premise Cable Electricals:**

| Freq. (MHz) | Max. Attenuation (dB/100 m) | Min. NEXT (dB) | Min. PSNEXT (dB) | Min. SRL (dB) | Fitted Imp. (Ohms) |
|---|---|---|---|---|---|
| 1.0 | 2.000 | 62 | N/A | 23 | 100 ± 15% |
| 4.0 | 4.100 | 53 | N/A | 23 | 100 ± 15% |
| 8.0 | 5.800 | 48 | N/A | 23 | 100 ± 15% |
| 10.0 | 6.500 | 47 | N/A | 23 | 100 ± 15% |

| | | | | | |
|---|---|---|---|---|---|
| 16.0 | 8.200 | 44 | N/A | 23 | 100 ± 15% |
| 20.0 | 9.300 | 42 | N/A | 23 | 100 ± 15% |
| 25.0 | 10.400 | 41 | N/A | 22 | 100 ± 15% |
| 31.25 | 11.700 | 39 | N/A | 21 | 100 ± 15% |
| 62.5 | 17.000 | 35 | N/A | 18 | 100 ± 15% |
| 100 | 22.000 | 32 | N/A | 16 | 100 ± 15% |

## Multi Conductor

### Physical Characteristics

#### Conductor

**AWG:**

| # Conductors | AWG | Stranding | Conductor Material | Dia. (mm) |
|---|---|---|---|---|
| 4 | 18 | 19x30 | BC - Bare Copper | 1.118 |

#### Insulation

**Insulation Material:**

| Insulation Material | Dia. (mm) |
|---|---|
| PVC - Polyvinyl Chloride | 1.676 |

**Insulation Color Code Chart:**

| Number | Color |
|---|---|
| 1 | Red |
| 2 | White |
| 3 | Green |
| 4 | Black |

#### Individual Shield

### Electrical Characteristics

**Nom. Capacitance Conductor to Conductor:**

| Capacitance (pF/m) |
|---|
| 49.215 |

**Nominal Velocity of Propagation:**

| VP (%) |
|---|
| 70.000 |

**Nom. Conductor DC Resistance:**

| DCR @ 20°C (Ohm/km) |
|---|
| 30.776 |

**Max. Operating Voltage - UL:**

| Voltage |
|---|
| 300 V RMS |

**Max. Recommended Current:**

| Current |
|---|
| 4 Amps per conductor @ 25°C |

**Other Electrical Characteristic 1:** Third party verified to TIA/EIA 568-B.2, Category 5

## Physical Characteristics (Overall)

#### Conductor

#### Outer Shield

**Outer Shield Material:**

| Outer Shield Material |
|---|
| Unshielded |

#### Outer Jacket

**Outer Jacket Material:**

| Outer Jacket Material |
|---|
| PVC - Polyvinyl Chloride |

**Outer Jacket Ripcord:** Yes

## 7951A Composite - Composite Data, Audio, Video, Security and Control Cable

### Overall Cable

| | |
|---|---|
| **Overall Nominal Diameter:** | 10.338 mm |

## Mechanical Characteristics (Overall)

| | |
|---|---|
| **Operating Temperature Range:** | -20°C To +75°C |
| **Bulk Cable Weight:** | 110.127 Kg/Km |
| **Max. Recommended Pulling Tension:** | 547.129 N |
| **Min. Bend Radius/Minor Axis:** | 114.300 mm |

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

| | |
|---|---|
| **NEC/(UL) Specification:** | CMR |
| **CEC/C(UL) Specification:** | CMG |
| **EU Directive 2011/65/EU (ROHS II):** | Yes |
| **EU CE Mark:** | Yes |
| **EU Directive 2000/53/EC (ELV):** | Yes |
| **EU Directive 2002/95/EC (RoHS):** | Yes |
| **EU RoHS Compliance Date (mm/dd/yyyy):** | 04/01/2005 |
| **EU Directive 2002/96/EC (WEEE):** | Yes |
| **EU Directive 2003/11/EC (BFR):** | Yes |
| **CA Prop 65 (CJ for Wire & Cable):** | Yes |
| **MII Order #39 (China RoHS):** | Yes |
| **Other Specification:** | NEMA WC-63/1. Category 5 |

### Flame Test

| | |
|---|---|
| **UL Flame Test:** | UL1666 Riser |
| **CSA Flame Test:** | FT4 |

### Plenum/Non-Plenum

| | |
|---|---|
| **Plenum (Y/N):** | No |

## Electrical Characteristics (Overall)

**Max. Operating Voltage - UL:**

| Voltage |
|---|
| 300 V RMS |

## Notes (Overall)

**Notes:** Overall jacket sequentually marked.

## Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---|---|---|---|---|---|
| 7951A 3371000 | 1,000 FT | 84.000 LB | GREEN, LIGHT | C | COMPOSITE CABLE PVC |
| 7951A 337500 | 500 FT | 47.000 LB | GREEN, LIGHT | C | COMPOSITE CABLE PVC |

**Notes:**
C = CRATE REEL PUT-UP.

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