

7A20001 Category 7A S/FTP Cable, low smoke zero halogen, white jacket, 4 pair count, 1640 ft (500 m) length, reel

Product Classification

Regional Availability Asia | Australia/New Zealand | EMEA | Latin America

Portfolio LITANG®

Product Type Twisted pair cable

Ordering Note Available in Europe, Middle East, and Africa

General Specifications

Product Number 7A20001

ANSI/TIA Category 7A

Cable Component Type Horizontal

Cable Type S/FTP (shielded)

Conductor Type, singles Solid

Conductors, quantity 8

Jacket Color White

Pairs, quantity 4

Transmission Standards ISO/IEC 11801 Class FA

Dimensions

Cable Length 1640 ft | 499.872 m

Cable Length Tolerance ±5%

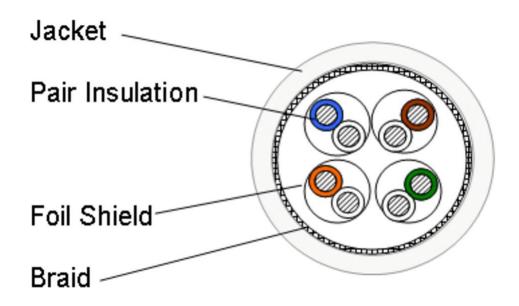
DiameterOver Jacket, nominal0.295 in | 7.493 mmJacket Thickness0.025 in | 0.635 mm

Conductor Gauge, singles 23 AWG

Cross Section Drawing



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Electrical Specifications

dc Resistance Unbalance, maximum 2 %

dc Resistance, maximum 7.61 ohms/100 m | 2.32 ohms/100 ft

Mutual Capacitance at Frequency 4.3 nF/100 m @ 1 kHz

Nominal Velocity of Propagation (NVP) 76 %

Operating Frequency, maximum 1000 MHz

Operating Voltage, maximum 80 V

Electrical Performance



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IL Insertion Loss (dB/100m)
NEXT Near End Crosstalk (dB/100m)

PSNEXT Power Sum Near End Crosstalk (dB/100m) ELFEXT Equal-Level Far End Crosstalk (dB/100m)

PSELFEXT Power Sum Equal-Level Far End Crosstalk (dB/100m)

RL Return Loss (dB)

| Freq (MHz) | IL | NEXT | PSNEXT | ELFEXT | PSELFEXT | RL |
|------------|------|------|--------|--------|----------|------|
| 1 | 2.1 | 78.0 | 75.0 | 78.0 | 75.0 | 20.0 |
| 4 | 3.7 | 78.0 | 75.0 | 78.0 | 75.0 | 23.0 |
| 8 | 5.2 | 78.0 | 75.0 | 77.2 | 74.2 | 24.5 |
| 10 | 5.8 | 78.0 | 75.0 | 75.3 | 72.3 | 25.0 |
| 16 | 7.3 | 78.0 | 75.0 | 71.2 | 68.2 | 25.0 |
| 20 | 8.2 | 78.0 | 75.0 | 69.3 | 66.3 | 25.0 |
| 25 | 9.2 | 78.0 | 75.0 | 67.3 | 64.3 | 24.3 |
| 31.25 | 10.3 | 78.0 | 75.0 | 65.4 | 62.4 | 23.6 |
| 62.5 | 14.6 | 78.0 | 75.0 | 59.4 | 56.4 | 21.5 |
| 100 | 18.5 | 75.4 | 72.4 | 55.3 | 52.3 | 20.1 |
| 155 | 23.2 | 72.5 | 69.5 | 51.5 | 48.5 | 18.8 |
| 200 | 26.5 | 70.9 | 67.9 | 49.3 | 46.3 | 18.0 |
| 250 | 29.7 | 69.4 | 66.4 | 47.3 | 44.3 | 17.3 |
| 300 | 32.7 | 68.2 | 65.2 | 45.8 | 42.8 | 17.3 |
| 350 | 35.4 | 67.2 | 64.2 | 44.4 | 41.4 | 17.3 |
| 400 | 38.0 | 66.4 | 63.4 | 43.3 | 40.3 | 17.3 |
| 500 | 42.8 | 64.9 | 61.9 | 41.3 | 38.3 | 17.3 |
| 550 | 45.0 | 64.3 | 61.3 | 40.5 | 37.5 | 17.3 |
| 600 | 47.1 | 63.7 | 60.7 | 39.7 | 36.7 | 17.3 |
| 650 | 49.2 | 63.2 | 60.2 | 39.0 | 36.0 | 17.0 |
| 700 | 51.1 | 62.7 | 59.7 | 38.4 | 35.4 | 16.6 |
| 750 | 53.1 | 62.3 | 59.3 | 37.8 | 34.8 | 16.3 |
| 800 | 54.9 | 61.9 | 58.9 | 37.2 | 34.2 | 16.1 |
| 850 | 56.7 | 61.5 | 58.5 | 36.7 | 33.7 | 15.8 |
| 900 | 58.5 | 61.1 | 58.1 | 36.2 | 33.2 | 15.5 |
| 950 | 60.2 | 60.7 | 57.7 | 35.7 | 32.7 | 15.3 |
| 1000 | 61.9 | 60.4 | 57.4 | 35.3 | 32.3 | 15.1 |
| 1100 | 65.2 | 59.8 | 56.8 | 34.5 | 31.5 | 14.7 |
| 1200 | 68.4 | 59.2 | 56.2 | 33.7 | 30.7 | 14.3 |

^{*}Values above 1000 MHz are for engineering purposes only.

Material Specifications

Conductor Material Bare copper
Insulation Material Polyolefin

Jacket Material Low Smoke Zero Halogen (LSZH)

Shield (Braid) Material Tinned copper

Shield (Tape) Material Polyester/Aluminum shield

Mechanical Specifications

Pulling Tension, maximum 25 lb | 11.34 kg

Environmental Specifications

Installation temperature $0 \, ^{\circ}\text{C} \text{ to } +50 \, ^{\circ}\text{C} \, (+32 \, ^{\circ}\text{F to } +122 \, ^{\circ}\text{F})$

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Operating Temperature $-20 \, ^{\circ}\text{C} \text{ to } +60 \, ^{\circ}\text{C} \, (-4 \, ^{\circ}\text{F to } +140 \, ^{\circ}\text{F})$

Acid Gas Test Method IEC 60754-2

EN50575 CPR Cable EuroClass Dca | a1 | d1 | s2

Environmental Space Low Smoke Zero Halogen (LSZH)

Flame Test Method IEC 60332-3-24

Smoke Test Method IEC 61034-2

Packaging and Weights

Cable weight 43.14 lb/kft | 5.964 kg/km

Packaging Type Reel

Regulatory Compliance/Certifications

Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

CHINA-ROHS Below maximum concentration value

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

REACH-SVHC Compliant as per SVHC revision on www.litangcables.com/ProductCompliance

ROHS Compliant

