



GIGALAN AUGMENTED CAT 7 S/FTP LSZH

Product Type LAN Cable

Product Family GigaLan Augmented

Construction RoHS Compliant

Category 7

S/FTP

LSZH

General Characteristics

Features

4 pairs twisted cable, using solid bare copper, 23 AWG, insulated with a high density polyethylene. Each pair is individually shielded by an aluminum foil tape. A solid tinned copper braid is applied over the cable core. External jacket using LSZH - low smoke zero halogen compound.

Installation Environment Internal

Operation Environment Non heavy

Compatibility All FCS (Furukawa Cabling System) products

Standards Compliance IEC 60332, ISO/IEC 11801 and EN 50173-1 CATEGORY 7

Certifications ETL Verified 101177493CRT-001

Constructive characteristic

Conductor Solid bare copper with nominal diameter 23AWG.

Insulation Foamed Polyethylene. Insulated conductor nominal diameter: 1.4 mm

Insulation Resistance 5000 MΩ.km

Number of Pairs 4 pairs, 23AWG

Pair Each conductor is identified according to the following color sequence.

Color Codes

| Pair | Insulation Color "A" | Insulation Color "B" |
|------|----------------------|-----------------------|
| 1 | Blue | White / Blue Stripe |
| 2 | Orange | White / Orange Stripe |
| 3 | Green | White / Green Stripe |
| 4 | Brown | White / Brown Stripe |

Cabling All individually shielded pairs are assembled, making the cable core.

Ripcord With ripcord

| | |
|-------------------------|---|
| Shield | Over each single pair an aluminum foil tape (Al/PET) is applied with its conductive side facing outwards. The cable core is covered by a solid tinned copper braid. |
| Sheath | LSZH compound, flame retardant, suitable to meet the cable flame rating class |
| Nominal Diameter | Nominal diameter (O.D): 7.8mm |
| Color | Standard colors: Green and Gray |
| Cable Weight | 61kg/km |

Physical Characteristics

| | |
|----------------------------------|---|
| Cable Flammability Rating | LSZH: Cable shall comply with IEC 60332 Part 3-25: "Test for vertical flame spread of vertically mounted bunched wires or cables" LSZH-1: Cable shall comply with IEC 60332 Part 1-2: "Test for vertical flame propagation for a single insulated wire or cable" |
|----------------------------------|---|

| | |
|---------------------------------|------------------|
| Installation Temperature | 0°C up to 50°C |
| Storage Temperature | -40°C up to 70°C |
| Operation Temperature | -20°C up to 60°C |

Electrical Characteristics

| | |
|---|-------------|
| Maximum Unbalance Resistance | 2% |
| Conductor Max. DC Resistance at 20°C | 73.2 Ω/km |
| Maximum Mutual Capacitance 1kHz | 56 pF/m |
| Max. Unbalance Capacitance Pair x Ground | 1.6 pF/m |
| Maximum Delay Skew | 25 ns/100 m |
| NVP | 65% |

Transfer Impedance Transfer Impedance shall be in accordance with Grade 1 at IEC 61156-5 and shall not exceed the values shown in Table below at the discrete frequencies indicated.

| Frequency (MHz) | Maximum surface Transfer Impedance (mΩ/m) |
|--------------------|--|
| 1 | < 10 |
| 10 | < 10 |
| 30 | < 30 |
| 100 | < 100 |

| Transmission Performance | Freq, MHz | Input Impedance, Ohms | Attenuation, max dB/100m | NEXT, min dB | PS NEXT, min dB | ACRF, min dB | PS ACRF, min dB | RL, min dB | TCL, min dB | Prop Delay, max dB |
|--------------------------|-----------|-----------------------|--------------------------|--------------|-----------------|--------------|-----------------|------------|-------------|--------------------|
| | 1 | - | - | 78,0 | 75,0 | 78,0 | 75,0 | - | 40,0 | - |
| | 4 | 100 +/- 15 | 3,7 | 78,0 | 75,0 | 78,0 | 75,0 | 23,0 | 34,0 | 552 |
| | 10 | 100 +/- 15 | 5,9 | 78,0 | 75,0 | 74,0 | 71,0 | 25,0 | 30,0 | 545 |
| | 16 | 100 +/- 15 | 7,4 | 78,0 | 75,0 | 69,9 | 66,9 | 25,0 | 28,0 | 543 |
| | 20 | 100 +/- 15 | 8,3 | 78,0 | 75,0 | 68,0 | 65,0 | 25,0 | 27,0 | 542 |
| | 25 | 100 +/- 15 | 9,3 | 78,0 | 75,0 | 66,0 | 63,0 | 24,3 | 26,0 | 541 |
| | 31 | 100 +/- 15 | 10,4 | 78,0 | 75,0 | 64,1 | 61,1 | 23,6 | 25,1 | 540 |
| | 63 | 100 +/- 15 | 14,9 | 75,5 | 72,5 | 58,1 | 55,1 | 21,5 | 22,0 | 539 |
| | 100 | 100 +/- 15 | 19,0 | 72,4 | 69,4 | 54,0 | 51,0 | 20,1 | 20,0 | 538 |
| | 155 | 100 +/- 22 | 24,0 | 69,5 | 66,5 | 50,2 | 47,2 | 18,8 | 18,1 | 537 |
| | 200 | 100 +/- 22 | 27,5 | 67,9 | 64,9 | 48,0 | 45,0 | 18,0 | 17,0 | 537 |
| | 250 | 100 +/- 25 | 31,0 | 66,4 | 63,4 | 46,0 | 43,0 | 17,3 | - | 536 |
| | 300 | 100 +/- 25 | 34,2 | 65,2 | 62,2 | 44,5 | 41,5 | 17,3 | - | 536 |
| | 600 | 100 +/- 25 | 50,1 | 60,7 | 57,7 | 38,4 | 35,4 | 17,3 | - | 535 |

Marking FURUKAWA GIGALAN AUGMENTED CAT. 7 S/FTP 23AWGX4P LSZH 75°C VERIFIED TO ISO/IEC 11801 EN 50173-1 CAT 7 FISA ---- AAMMDHm JNN {1}m

Where:

AAMMDHm: AA-year; MM- month; DD- day; HH- hour; mm- minute

JNN: Batch Number

{1} - decreasing sequential length marking starting from 305 m to 001 m

Package Plywood reel

Standard Length 305 meters