



Category 6A Shielded RJ-45 LS0H Modular Cords



Western Wire shielded copper RJ-45/RJ-45 CAT 6A modular cords, 100 Ohm impedance, 4-pair S/FTP for work area, jumper and patching in local area networks (LANs). Western Wire CAT 6A modular cords exceed all ANSI/TIA-568-C.2 requirements for Augmented Category 6 needed to support 10GBASE-T, they are specially designed to provide outstanding Alien Crosstalk Loss and their plugs fully conform to IEC 60603-7-51. Western Wire CAT 6A cords are Verified by DELTA-EC and each cord supplied is individually tested. The Western Wire Logo ensures long lasting high-performance and full support of all present and emerging applications, including 10GBASE-T (10 Gigabit-Ethernet).

Applications

Western Wire CAT 6A shielded modular cords fully support all present applications in standard Channels with up to 4 connectors including the following:

- 10GBASE-T 10 Gigabit Ethernet
- 100BASE-T Gigabit Ethernet
- ATM 155
- TP-PMD
- 100BASE-T "Fast Ethernet"
- 100BASE-T2, 100BASE-T4 & 100BASE-TX
- Token Ring 100 Mbps
- ATM 52 & ATM 25
- 10BASE-T Ethernet
- Token Ring 4 & 16 Mbps
- Broadband and Baseband Video
- ISDN Basic and Primary Access
- 1BASE-5 "Starlan"
- ITU V.21 & X.11

Features

- Small Form design of 11.5 mm width - fits easily into most wall outlets and 24-port 1U blank panels.
- Exceeding Category 6A performance - providing full support to 10 Gigabit Ethernet.
- Every cord tested individually prior to shipment - providing the highest degree of quality assurance.
- Exceptional material properties and cable design - providing the highest degree of reliability.
- High Return Loss and NEXT Loss values - providing low BER (Bit-Error-Rate) in all applications.
- Extremely high pair-balance and overall cable shield - providing excellent alien crosstalk loss and noise immunity.
- S/FTP cable construction - providing excellent EMC and abuse resistance.
- Smooth and limp jacket - proving comfortable cord handling.
- Low-smoke, Zero-Halogen construction - providing maximum safety and minimum risk during fire.

Qualifications & Approvals

Western Wire CAT 6A modular cords are tested and DELTA-EC verified at the component level. They comply with IEC 60603-7-51 (8-way, shielded, free and fixed connectors, for data transmission with frequencies up to 500 MHz) and conform to the following standards:

Transmission

ANSI/TIA-568-C.2 CAT 6A
ISO/IEC-11801 CAT 6A
EN 50173 CAT 6A

EMC

EN-55022, Class B (Europe)
FCC Part 15, Subpart J, Class A (USA)
UL94 V-0 rated plastic materials
Zero-halogen in LS0H constructions
EU Directive 2002/95/EC (RoHS)

Safety

Electrical Properties @ 20C

| | |
|--------------------------|-------------------------------|
| Characteristic Impedance | 100±6 Ohm @ 1-500 MHz |
| Contact Resistance | 20 mOhm max. |
| Resistance unbalance | 2% max. |
| Voltage rating | 72 Vdc max. |
| Dielectric strength | 1000 Volts/1 minute min rms |
| Ampacity | 1.0 Amps max. |
| Insulation Resistance | 500 MOhm min. @ 500 Vdc |
| Coupling attenuation | 85 dB min @ 30-100 MHz |
| | 85-20log(f/100) @ 100-500 MHz |
| Transfer Impedance | 10mOhm/m max @ 1-10 MHz |
| | 30 mOhm/m max @ 30 MHz |

Mechanical Properties

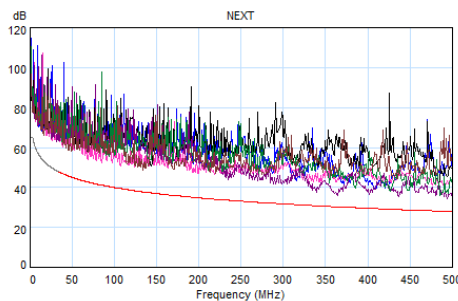
4 color-coded, individually foil shielded twisted pairs cabled together, overall braid shielded and jacketed. Both cable ends terminated with shielded RJ-45 modular plugs conforming to IEC 60603-7-51.

| | |
|--------------------------------|---|
| Basic Cable Conductor | Stranded, 26 AWG, 7x0.16 mm, bare annealed copper |
| Wire Insulation | Polyolefin |
| Number of insulated conductors | 8, twisted in 4 pairs. |
| Color Code of Pairs | Blue x White/Blue, Orange x White/Orange, Green x White/Green, Brown x White/Brown. |
| Individual pair shield | Polyester-Aluminum foil, providing 100% coverage with 25% overlap, aluminum facing out. |
| Overall shield | Tinned copper braid laid in close contact with the individual foil shields. |
| Drain wire | None. |
| Outer Jacket | LS0H Halogen free flame retardant compound. |
| Cable to plug tensile strength | 9 Kgf (90N) min. |
| Pulling force | 1 Kgf (10N) max. |
| Storage Temperature | -20 to +80C |
| Durability | 750 mating cycles |
| Cable OD | 6.5 mm nom. |
| Bend radius | 25 mm min. |
| Plug housing material | Polycarbonate, conforming to UL 94 V-0. |
| Plug contact material | 1.27 µm gold plating over 2.5 µm nickel plated copper alloy. |
| Temperature operating range | -20 to +60C |
| Flame Test | IEC 60332-1 |
| Halogen gas & smoke tests | IEC 60754 (gas) & IEC 61034 (smoke) |

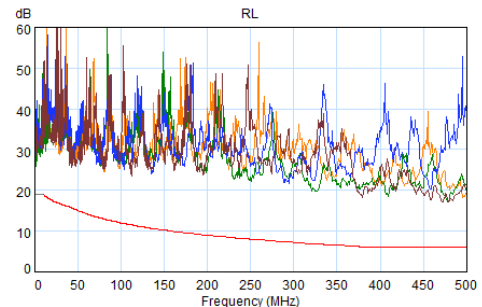
Transmission Properties @ 20C

| FREQ. MHz | Min. NEXT dB | | | | Min. RL dB |
|-----------|--------------|----------|----------|-----------|------------|
| | 1 m Cord | 2 m Cord | 5 m Cord | 10 m Cord | |
| 1 | 65.0 | 65.0 | 65.0 | 65.0 | 19.8 |
| 10 | 65.0 | 65.0 | 64.5 | 63.0 | 22.8 |
| 16 | 62.7 | 62.0 | 60.5 | 59.1 | 23.4 |
| 20 | 60.7 | 60.1 | 58.7 | 57.3 | 23.7 |
| 25 | 58.8 | 58.2 | 56.8 | 55.4 | 24.0 |
| 31.25 | 56.9 | 56.3 | 54.9 | 53.6 | 23.0 |
| 62.5 | 51.0 | 50.4 | 49.2 | 48.1 | 20.0 |
| 100 | 47.0 | 46.4 | 45.4 | 44.5 | 18.0 |
| 200 | 41.1 | 40.7 | 39.9 | 39.3 | 15.0 |
| 250 | 39.3 | 38.9 | 38.1 | 37.7 | 14.0 |
| 500 | 28.2 | 28.4 | 29.0 | 29.8 | 9.5 |

Typical Channel NEXT



Typical Channel RL



Ordering Information

| WW P/N | Description | Length | CABLE | BOOT |
|---------------|---|--------|---------------|--------------------|
| G6A-00480-051 | 4x2x26# S/FTP SHIELDED CAT 6A LS0H RJ-45 Modular Cord | 0.5 m | GREY RAL 7035 | DARK BLUE RAL 5013 |
| G6A-00480-101 | 4x2x26# S/FTP SHIELDED CAT 6A LS0H RJ-45 Modular Cord | 1 m | GREY RAL 7035 | DARK BLUE RAL 5013 |
| G6A-00480-201 | 4x2x26# S/FTP SHIELDED CAT 6A LS0H RJ-45 Modular Cord | 2 m | GREY RAL 7035 | DARK BLUE RAL 5013 |
| G6A-00480-301 | 4x2x26# S/FTP SHIELDED CAT 6A LS0H RJ-45 Modular Cord | 3 m | GREY RAL 7035 | DARK BLUE RAL 5013 |
| G6A-00480-501 | 4x2x26# S/FTP SHIELDED CAT 6A LS0H RJ-45 Modular Cord | 5 m | GREY RAL 7035 | DARK BLUE RAL 5013 |
| G6A-00480-A01 | 4x2x26# S/FTP SHIELDED CAT 6A LS0H RJ-45 Modular Cord | 10 m | GREY RAL 7035 | DARK BLUE RAL 5013 |

Other colors & lengths available upon request.