SLANPRO

Cabling - Copper Solutions

LP-CA0J0GRB

LanPro Performax®, Unshielded Network Cable CAT 6A U/UTP, with gray color LSZH-rated jacket, Low smoke Zero-Halogen

LPCA0J0GRB_SS_ENB01W

Features

- Specified and Tested to 500 MHz.
- Lower Bit Error Rates increases network efficiency and uptime.
- Very Flexible, reduces installation costs and maintenance.
- Superior performance to traditional designs.
- 568-A and 568-B compatible.
- Rugged Construction.
- Backward compatible with CAT 6 and CAT 5e systems.
- Excellent price/performance ratio.
- 4 pairs 23 AWG UTP.
- Reliable CAT 6A is a robust product.
- Packaged in one convenient presentation. 1000 feet (305±1.5m) per box.
- Operating voltage \leq 48 Vrms.
- Exceeds ANSI/TIA-568-C.2, ISO/IEC 11801, IEC 60332-1C requirements.
- Flame rating: LSZH thermoplastic cover Jacket.
- DELTA No. 2014-111.
- Comply IEEE 802.3an (10G-BaseT) and 802.3af/at (PoE full power specs).



LP-CA0J0GRB LanPro Performax®, Unshielded Network Cable CAT 6A U/UTP, with gray color LSZH-rated jacket, Low smoke Zero-Halogen

LanPro Performax®, Unshielded Network Cable CAT 6A U/UTP, with gray color LSZH-rated jacket for easy identification, is the answer given by LanPro to the demand imposed by today's high performance applications at reasonable prices. Tested to well over 500 MHz, the guaranteed performance of this cable meets the ANSI/TIA-568-C.2, ISO/IEC 11801, DELTA No. 2014-111, making it ideal for transmission links supporting today's networking protocols up to 10G.

IMPORTANT NOTE:

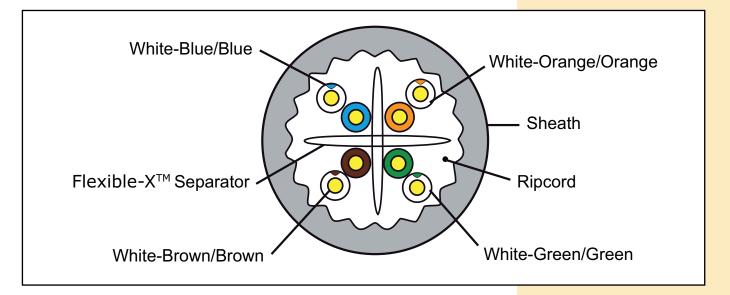
The LSZH cables when taking fire, generate fumes that doesn't contain halogens resulting in a cable safer to use in public places, fire propagation speed is similar to CMX.

Applications

LanPro Performax® LP-CA0J0GRB CAT 6A U/UTP Unshielded Network Cable, with gray color LSZH-rated jacket is intended for high speed data applications, including 10 Gigabit Ethernet, 100BASE-Tx, token-ring, 155 Mbps ATM, 100 Mbps TP-PMD, ISDN, analog (Broadband, Baseband), digital video and Voice over IP (VoIP), it can also be used for Video surveillance IP cameras and 100BASE-TX and 4/16 Mb/s Token Ring.

| Standards IISO/IEC11801, TIA/EIA 568.C.2, DELTA Approval N 2014-111, IEC 60332-1C Amerial 100% Copper Image: Conductor AWG # 23 Image: Conductor AWG # 23 Image: Conductor AWG # 23 Image: Conductor Aminal Diameter (mm) 0.570 Positive tolerance +0.005 Isolation layer Material HDPE Image: Conductor -0.005 Jacket Material 1.0340.03 Image: Conductor -0.005 Surface finish Clean Image: Conductor -0.005 Material Color Gray Image: Conductor -0.005 Color Gray Image: Conductor -0.005 -0.005 Markings Color Gray Image: Conductor -0.005 Print error & Space ≤ ± 0.5%, 1m Image: Conductor -0.005 3. Green - White/Blue 3.0±0.3 mm Image: Conductor -0.005 Packing length 3.05±1.0m Image: Conductor -0.005 Packing length 3.05±1.0m 21.5 Image: Conductor Riperoid (PCxhrs) 100PCx | | 3 Technical Specifications | | | | | | | |
|--|-----------------|---|-----------------------------|-------------------------|------|--|--|--|--|
| ConductorAWG #23Positive tolerance $+0.005$ Nominal Diameter (mm) 0.570 Positive tolerance $+0.005$ Isolation layerMaterialHDPE -0.005 JacketDiameter (mm) 1.03 ± 0.03 -0.05 JacketThickness $0.65\pm0.05 \text{ mm}$ -0.05 MaterialLiszH, complies with RoHS -0.05 Surface finishClean -0.05 MaterialLisZH, complies with RoHS -0.05 ColorGray -0.05 ColorGray -0.05 Parter & Space $\leq \pm0.5\%$, 1m -0.05 PackingBox -0.05 Packing length $30\pm1.0m$ -0.05 RipcordYes -0.05 Packing length $305\pm1.0m$ ≥ 13.5 Filogation (%) ≥ 15.5 -0.05 Elongation (%) ≥ 12.5 -0.05 Cold bend (-20 $\pm29Cx4h$) 8xCable 0.D. No visible $-xc-x$ -0.05 After Aging Tensile Strength (Mpa) ≥ 12.5 -0.05 Elongation (%) ≥ 12.5 -0.05 Cold bend (-20 $\pm29Cx4h$) 8xCable 0.D. No visible $-xc-x$ -0.05 Cold bend (-20 $\pm29Cx4h$) 8xCable 0.D. No visible $-xc-x$ -0.05 Fenperature rating $75^{os}C.$ -0.05 Safety test voltage $kAV/Imin. (DC).$ -0.05 Hutual Capacitance $4.2 nF/100M mm.$ -0.05 Part to ground $330F/100M max$ -0.05 Part to ground $330F/100M max$ -0.05 | Standards | IISO/IEC11801, TIA/EIA 568.C.2, DELTA Approval No. 2014-111, IEC 60332-1C | | | | | | | |
| Conductor Mominal Diameter (mm) 0.570 Positive tolerance +0.005 Isolation layer Material HDPE -0.005 Janeter (mm) 1.03±0.03 - -0.005 Janeter (mm) 1.03±0.03 - -0.005 Janeter (mm) 0.65±0.05 m//// - - Jacket Thickness 0.65±0.05 m//// - Surface finish Clean - - Material LSZH, complies with RoHS - - Color Gray - - - Markings Color Gray - - Color Sargen Sargen - - Markings Letter height 3.0±0.3 m//// - - Print error & Space ≤ ±0.5%, 1m/// - - - Box - 2.0range - White/Orange - - Packing length 305±1.0m ≥13.5 - - Isogatin (%) ≥15.5 - <t< th=""><th rowspan="3">Conductor</th><th>Material</th><th>100% Copper</th><th></th></t<> | Conductor | Material | 100% Copper | | | | | | |
| Nominal Diameter (mm) 0.570 Positive tolerance +0.005 Isolation layer Material HDPE -0.005 Jacket Diameter (mm) 1.03±0.03 < | | AWG # | 23 | | | | | | |
| Isolation layer Diameter (mm) 1.03±0.03 Image: Constant in the | | Nominal Diameter (mm) | 0.570 | 0.570 | | | | | |
| Diameter (mm) 1.03±0.03 Image: Second Seco | Isolation layer | Material | HDPE | | | | | | |
| Jacket External Diameter, (0.D.) 6.9±0.4 mm I Surface finish Clean I Material LSZH, complies with RoHS I Color Gray I Markings Letter height 3.0±0.3 mm I Color Black I I Print error & Space ≤ ±0.5%, 1m I I Core Color 1. Blue- White/Blue 2. Orange - White/Orange I 3. Green - White/Green 2. Orange - White/Orange I I Packing Box I I I I Packing length 305±1.0m ≥13.5 I I Ripcord Yes I I I I I Jacket Physical Soft-1.00° ≥150 I | | Diameter (mm) | 1.03±0.03 | | | | | | |
| Jacket Surface finish Clean Image: Clea | | Thickness | 0.65±0.05 mm | | | | | | |
| MaterialLSZH, complies with RoHSImage: ColorGolorGrayImage: ColorMarkingsLetter height3.0±0.3 mmImage: ColorColorBlackImage: ColorSlackImage: ColorPrint error & Space≤±0.5%, 1m2.0range - White/Orange2.0range - White/OrangeOree Color1. Blue - White/Blue2.0range - White/Orange2.0range - White/Orange3. Green - White/Green4. Brown - White/Brown4. Brown - White/BrownPackingBox4. Brown - White/BrownPacking length305±1.0m13.5RipcordYes150Elongation (%)≥150150Aging Period (°C×hrs) 100°C×24h×7dAfter Aging Tensile Strength (Mpa)≥12.5Elongation (%)≥12.5150Cold bend (-20±2°C×4h) 8×Cable 0.D. No visible cracks1Cold bend (-20±2°C×4h) 8×Cable 0.D. No visible cracks1Femperature rating5°C.Safety test voltage1kv/1min. (DC).Mutual Capacitance4.2 nF/1000 mm.Pair to ground330pF/100m mm. | | External Diameter, (O.D.) | 6.9±0.4 mm | | | | | | |
| ColorGrayImage: spaceMarkingsLetter height3.0±0.3 mmImage: spaceColorBlackImage: spaceImage: spacePrint error & Space≤ ±0.5%, 1mImage: spaceCore Color1. Blue- White/Blue2. Orange - White/Orange3. Green - White/Green4. Brown - White/BrownPacking length305±1.0m4. Brown - White/BrownPacking length305±1.0m≥13.5RipcordYesImage: spaceBefore Aging Tensile Strength (Mpa)≥13.5Elongation (%)≥150Aging Period (°C×hrs) 100°C×24h×7d>150Aging Period (°C×hrs) 100°C×24h×7d>12.5Iongation (%)≥12.5Cold bend (-20±2°C×4h) 8×Cable 0.D. No visible c=v=v=v=v=v=v=v=v=v=v=v=v=v=v=v=v=v=v=v | Jacket | Surface finish | Clean | Clean | | | | | |
| Markings Letter height 3.0±0.3 mm Image: Color Black Image: Color Black Image: Color Black Image: Color | | Material | LSZH, complies | , complies with RoHS | | | | | |
| Markings Color Black Image: Color Print error & Space ≤ ±0.5%, 1m 1. Blue- White/Blue 2. Orange - White/Orange 3. Green - White/Green 4. Brown - White/Brown Packing Box Packing length 305±1.0m Ripcord Yes Before Aging Tensile Strength (Mpa) ≥13.5 Elongation (%) ≥150 Aging Period (°C×hrs) 100°C×24h×7d After Aging Tensile Strength (Mpa) ≥12.5 Elongation (%) ≥12.5 Cold bend (-20±2°C×4h) 8×Cable O.D. No visible cracks Operating voltage ≤ 48 Vrms Temperature rating 75°C. Safety test voltage 1kv/1min. (DC). Pair to ground 330F/100 mom. | | Color | Gray | | | | | | |
| Print error & Space ≤ ±0.5%, 1m Core Color 1. Blue- White/Blue 2. Orange - White/Orange 3. Green - White/Green 4. Brown - White/Brown Packing Box Packing length 305±1.0m Ripcord Yes Before Aging Tensile Strength (Mpa) ≥13.5 Elongation (%) ≥150 Aging Period (°C×hrs) 100°C×24h×7d After Aging Tensile Strength (Mpa) Properties Operating voltage Iongation (%) ≥12.5 Cold bend (-20±2°C×4h) 8×Cable O.D. No visible | | Letter height | 3.0±0.3 mm |).3 mm | | | | | |
| 1. Blue- White/Blue 2. Orange - White/Orange 3. Green - White/Green 4. Brown - White/Orange Packing Box Packing length 305±1.0m Ripcord Yes Before Aging Tensile Strength (Mpa) ≥13.5 Elongation (%) ≥150 Aging Period (°C×hrs) 100°C×24h×7d After Aging Tensile Strength (Mpa) Properties After Aging Tensile Strength (Mpa) ≥12.5 Cold bend (-20±2°C×4h) 8×Cable O.D. No visible cracks Cold bend (-20±2°C×4h) 8×Cable O.D. No visible cracks Properties Operating voltage ≤ 48 Vrms Temperature rating 75°C. Safety test voltage Itw/1min. (DC). Mutual Capacitance 4.2 nF/100 M nom. Pair to ground 330pF/100m max. Contact of the contact of t | Markings | Color | Black | | | | | | |
| Core Color 3. Green - White/Green 4. Brown - White/Brown Packing Box 4. Brown - White/Brown Packing length 305±1.0m 305±1.0m Ripcord Yes 5 Jacket Physical Properties Before Aging Tensile Strength (Mpa) ≥13.5 5 Iongation (%) ≥150 4fter Aging Tensile Strength (Mpa) ≥12.5 Elongation (%) ≥12.5 5 5 Cold bend (-20±2°C×4h) 8×Cable 0.D. No visible cracks 5 5 Operating voltage ≤ 48 Vrms 5 Temperature rating 75°C. 5 Safety test voltage 1kv/1min. (DC). 4.2 nF/100 M nom. Pair to ground 330pF/100m max. 6 6 | | Print error & Space | ≤ ±0.5%, 1m | | | | | | |
| 3. Green - White/Green 4. Brown - White/Brown Packing Box Packing length 305±1.0m Ripcord Yes Jacket Before Aging Tensile Strength (Mpa) ≥13.5 Elongation (%) ≥150 Aging Period (°C×hrs) 100°C×24h×7d After Aging Tensile Strength (Mpa) ≥12.5 Elongation (%) ≥125 Cold bend (-20±2°C×4h) 8×Cable 0.D. No visible c=vector Iongation (%) ≥125 Cold bend (-20±2°C×4h) 8×Cable 0.D. No visible c=vector Femperature rating 5°C. Safety test voltage Imperature rating 75°C. Safety test voltage Mutual Capacitance 4.2 nF/100 M nom. Pair to ground 330pF/100m max. | Core Color | 1. Blue– White/Blue | | 2. Orange - White/Orang | | | | | |
| Packing length 305±1.0m Ripcord Yes Jacket Before Aging Tensile Strength (Mpa) ≥13.5 Elongation (%) ≥150 Aging Period (°C×hrs) 100°C×24h×7d After Aging Tensile Strength (Mpa) Properties After Aging Tensile Strength (Mpa) ≥12.5 Elongation (%) ≥12.5 Cold bend (-20±2°C×4h) 8×Cable O.D. No visible cr-cks Cold bend (-20±2°C×4h) 8×Cable O.D. No visible cr-cks Operating voltage ≤ 48 Vrms Temperature rating 75°C. Safety test voltage 1kv/1min. (DC). Mutual Capacitance 4.2 nF/100 M nom. Pair to ground 330pF/100m max. | | 3. Green - White/Green | | 4. Brown – White/Bi | rown | | | | |
| Ripcord Yes Before Aging Tensile Strength (Mpa) ≥13.5 Elongation (%) ≥150 Aging Period (°C×hrs) 100°C×24h×7d After Aging Tensile Strength (Mpa) Properties Elongation (%) Zetter Aging Tensile Strength (Mpa) ≥12.5 Cold bend (-20±2°C×4h) 8×Cable O.D. No visible crucks Operating voltage ≤ 48 Vrms Temperature rating 75°C. Safety test voltage 1kv/1min. (DC). Mutual Capacitance 4.2 nF/100 M nom. Pair to ground 330pF/100m max. | Packing | Box | | | | | | | |
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| Jacket Physical PropertiesElongation (%)≥150Aging Period (°C×hrs) 100°C×24h×7dAfter Aging Tensile Strength (Mpa)≥12.5After Aging Tensile Strength (Mpa)≥125Cold bend (-20±2°C×4h) 8×Cable O.D. No visible crucksCold bend (-20±2°C×4h) 8×Cable O.D. No visible crucksOperating voltage≤ 48 VrmsTemperature rating75°C.Safety test voltage1kv/1min. (DC).Mutual Capacitance4.2 nF/100 M nom.Pair to ground330pF/100m max.On the D0 minit0.0 minit | Ripcord | Yes | | | | | | | |
| Jacket Physical Properties Aging Period (°C×hrs) 100°C×24h×7d After Aging Tensile Strength (Mpa) ≥12.5 Elongation (%) ≥125 Cold bend (-20±2°C×4h) 8×Cable O.D. No visible crucks Operating voltage ≤ 48 Vrms Temperature rating 75°C. Safety test voltage 1kv/1min. (DC). Mutual Capacitance 4.2 nF/100 M nom. Pair to ground 330pF/100m max. | | Before Aging Tensile Strength (Mpa) | ≥13.5 | | | | | | |
| Physical Properties After Aging Tensile Strength (Mpa) ≥12.5 Elongation (%) ≥125 Cold bend (-20±2°C×4h) 8×Cable O.D. No visible cracks Operating voltage ≤ 48 Vrms Temperature rating 75°C. Safety test voltage 1kv/1min. (DC). Mutual Capacitance 4.2 nF/100 M nom. Pair to ground 330pF/100m max. | | Elongation (%) | ≥150 | | | | | | |
| Properties After Aging Tensile Strength (Mpa) ≥12.5 Elongation (%) ≥125 Cold bend (-20±2°C×4h) 8×Cable O.D. No visible cracks Operating voltage ≤ 48 Vrms Temperature rating 75°C. Safety test voltage 1kv/1min. (DC). Mutual Capacitance 4.2 nF/100 M nom. Pair to ground 330pF/100m max. | Physical | Aging Period (°C×hrs) 100°C×24h×7d | | | | | | | |
| Electrical characteristics Cold bend (-20±2°C×4h) 8×Cable O.D. No visible cracks Operating voltage ≤ 48 Vrms Temperature rating 75°C. Safety test voltage 1kv/1min. (DC). Mutual Capacitance 4.2 nF/100 M nom. Pair to ground 330pF/100m max. | | After Aging Tensile Strength (Mpa) | ≥12.5 | | | | | | |
| Electrical characteristics Operating voltage ≤ 48 Vrms Mutual Capacitance 75°C. Safety test voltage 1kv/1min. (DC). Mutual Capacitance 4.2 nF/100 M nom. Pair to ground 330pF/100m max. | | Elongation (%) | ≥125 | | | | | | |
| Temperature rating 75°C. Safety test voltage 1kv/1min. (DC). Mutual Capacitance 4.2 nF/100 M nom. Pair to ground 330pF/100m max. | | Cold bend (-20±2°C×4h) 8×Cable O.D. No visible cracks | | | | | | | |
| Electrical characteristics Pair to ground 1kv/1min. (DC). Hutual Capacitance 4.2 nF/100 M nom. Safety to ground 330pF/100m max. | | Operating voltage | ≤ 48 Vrms | | | | | | |
| Electrical characteristics Mutual Capacitance 4.2 nF/100 M nom. Pair to ground 330pF/100m max. | | Temperature rating | 75°C. | | | | | | |
| Electrical characteristics Pair to ground 330pF/100m max. | | Safety test voltage | 1kv/1min. (DC | kv/1min. (DC). | | | | | |
| characteristics | | Mutual Capacitance | 4.2 nF/100 M n | 4.2 nF/100 M nom. | | | | | |
| | | Pair to ground | 330pF/100m max. | | | | | | |
| 20°C Conductor DC resistance 9.2 Ohm/100m max. at 20°C. | | Conductor DC resistance | 9.2 Ohm/100m max. at 20°C. | | | | | | |
| DC Resistance Unbalance 5% máx. | | DC Resistance Unbalance | 5% máx. | | | | | | |
| Characteristic Impedance 100±15 Ohm 1~500 MHz. | | Characteristic Impedance | 100±15 Ohm 1~500 MHz. | | | | | | |
| Propagation Delay skew 45 ns/100 m máx. 1~500 MHz. | | Propagation Delay skew | 45 ns/100 m máx. 1~500 MHz. | | | | | | |
| Velocity of Propagation 69% | | Velocity of Propagation | 69% | | | | | | |

Cable Structure



D Technical Performance (100m)

| Freq. (MHz) | Insertion Loss | NEXT ≥dB | PSNEXT | ELFEXT ≥dB | PSELFEXT ≥dB | Delay ≤ns |
|-------------|----------------|----------|--------|---------------|-----------------|--------------|
| 1 | 2.1 | 74.3 | 72.3 | 67.8 | 64.8 | 570.0 |
| 4.0 | 3.8 | 65.3 | 63.3 | 55.8 | 52.8 | 552.0 |
| 8.0 | 5.3 | 60.8 | 58.8 | 49.7 | 46.7 | 546.7 |
| 10.0 | 5.9 | 59.3 | 57.3 | 47.8 | 44.8 | 545.4 |
| 16.0 | 7.5 | 56.2 | 54.2 | 43.7 | 40.7 | 543.0 |
| 20.0 | 8.4 | 54.8 | 52.8 | 41.8 | 38.8 | 542.1 |
| 25.0 | 9.4 | 53.3 | 51.3 | 39.8 | 36.8 | 541.2 |
| 31.25 | 10.5 | 51.9 | 49.9 | 37.9 | 34.9 | 540.4 |
| 62.5 | 15.0 | 47.4 | 45.4 | 31.9 | 28.9 | 538.6 |
| 100 | 19.1 | 44.3 | 42.3 | 27.8 | 24.8 | 537.6 |
| 200 | 27.6 | 39.8 | 37.8 | 21.8 | 18.8 | 536.5 |
| 250 | 31.1 | 38.3 | 36.3 | 19.8 | 16.8 | 536.1 |
| 300 | 34.3 | 37.1 | 35.1 | 18.3 | 15.3 | 536.1 |
| 500 | 45.3 | 33.8 | 31.8 | 13.8 | 10.8 | 535.6 |

🔁 How to Order

LP-CA0J0GRB LanPro Performax®, Unshielded Network Cable CAT 6A U/UTP, with gray color LSZH-rated jacket, Low smoke Zero-Halogen, packed in 1000ft (305m) box.

LanPro is continuously improving its products and reserves the right to change specifications and availability without prior notice.