# LP-CA020XXB Unshielded LanPro Performax® CAT 6A U/UTP Network Cable, CMR rated.

LPCA020XXB\_SS\_ENB01W

#### **Features**

- Specified and tested to well over 500 MHz.
- Lower Bit Error Rate increases network efficiency and uptime.
- Very flexible, reduces installation costs and maintenance.
- Superior performance to traditional designs.
- 568A and 568B compatible.
- Rugged construction.
- Backward compatible with CAT 6 and CAT 5e systems.
- Excellent price/performance ratio.
- Available in gray and blue colors. Others upon request.
- 4 pairs, 23 AWG UTP cable.
- Jacket: CMR with a diameter of 6.9±0.4 mm.
- Complies ISO/IEC 11801;
   ANSI/TIA/EIA-568-C.2, UL 444, CSA 22.2 No. 214-08 (7/11/2008), UL 1666.
- Flame rating: CMR.
- Performax® is a robust product.
- Packaged in one convenient presentation: 1000 ft box (305±1.5m)
- □ Operating voltage ≤ 48 Vrms.
- Comply IEEE 802.3an (10G-BaseT) and 802.3af/at (PoE full power specs).



# LP-CA020XXB Unshielded LanPro Performax® CAT 6A U/UTP Network Cable, CMR rated.

Unshielded Performax® CAT 6A U/UTP Network CMR rated cable is the answer given by LanPro to the 10G channel 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, UL 444, CSA 22.2 No. 214-08 (7/11/2008), UL 1666 requirements, making it ideal for high-end transmission links supporting today's networking protocols.

Now with "Flexible-X" construction, LanPro Performax® CAT 6A U/UTP cable mantains the geometry of the pairs throughout the length of the cable, improving performance as well as field installation in 4-connector topologies and 100 meters.

The unshielded LanPro Performax® CAT 6A U/UTP Network cable is available for immediate delivery in gray and blue colors. Other colors available under request.

# Applications

Category 6A U/UTP cable is intended for high speed data applications including: 10G BASE-T, 100BASE-TX, 155 Mb/s ATM, 4/16 Mb/s Token Ring, to be used in riser installations, which rise between floors.

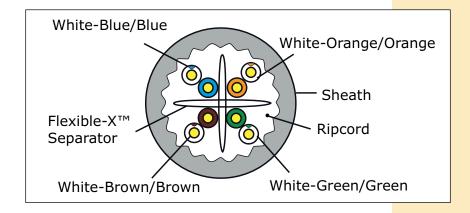
Riser cables may also penetrate other fire rated walls or floors.

#### **IMPORTANT NOTE:**

LanPro CAT 6A CMR Performax Cable is intended for use in riser applications whose main duty in case of fire is to avoid its propagation among building floors. The chemicals used to produce such stopping of fire propagation need substances that have high quantities of halides.

CMR cables when taking fire generate fumes that contain these halides. LanPro recommends to be cautious about the use of CMR in public places.

#### Specifications



#### **Construction Type:**

U/UTP 23 AWG 0.57 mm (0.023 in.) bare copper wire insulated with polyethylene. Two insulated conductors twisted together to form a pair, and four such pairs cabled to form the basic unit with a CMR jacket, by default.

#### **Twisted Pairs Color Codes:**

PAIR 1: Blue, White-Blue.

PAIR 2: Orange, White-Orange.

PAIR 3: Green, White-Green.

PAIR 4: Brown, White-brown.

#### **Central Isolation Member (Flexible-X):**

Maintains pair geometry before, during and after installation for optimal NEXT Loss performance. Made of PE (polyethylene).

#### Rip Cord:

For easy stripping.

#### **Cable Diameter:**

6.9±0.4 mm max cable jacket diameter provides better pathway fill over larger 10 Gb/s UTP cables.

#### **Standards Compliant:**

ISO/IEC 11801, ANSI/TIA/EIA-568-C.2, UL 444, CSA 22.2 No. 214-08 (7/11/2008), UL 1666.

## Physical Characteristics

#### Before Aging:

1.Tensile Strength (Mpa) ≥ 13.5

 $2.Elongation(\%) \ge 150$ 

After Aging:

- 1. Tensile Strength(Mpa) ≥ 12.5
- 2. Elongation(%)  $\geq$  125

Cold bend(-20±20×4h) 8×Cable O.D.No visible cracks.



#### Component

1. Conductor: AWG 23 0.570±0.005 mm.

2. Insulators: HDPE.

3. Insulators Diameter:  $1.03 \pm 0.03$  mm.

4. Jacket: CMR (Min. Thickness 0.65±0.05 mm).

5. Jacket Diameter: 6.9 ±0.4 mm.

#### Electric Characteristics

1. Operating voltage: ≤ 48 Vrms.

2. Temperature rating: 75°C.

Safety test voltage: 1kv/1min. (DC).
 Mutual Capacitance: 4.2 nF/100m nom.

5. Pair to ground: 330 pF/100 m max.

6. Conductor DC resistance: 9.2 Ohm/100 m max. at 20°C.

7. DC Resistance Unbalance: 5% max.

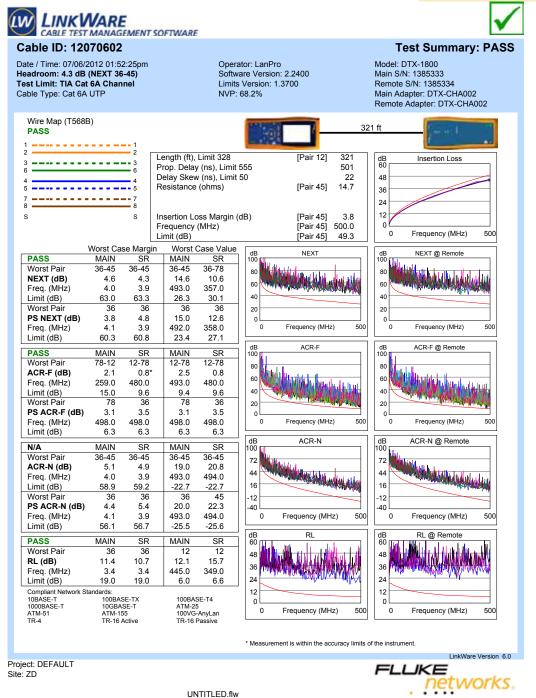
8. Characteristic Impedance:  $100\pm15$  Ohm  $1\sim500$  MHz. 9. Propagation Delay skew: 45 ns/100 m max.  $1\sim500$  MHz.

10. Velocity of Propagation: 69%.

#### Technical Performance

FREQ	Insertion Loss	NEXT	PSNEXT	ELFEXT	PSELFEXT	DELAY
MHz	(max. dB/100 m)	(min. dB)	(min. dB)	(min. dB)	(min. dB)	(ns/100 m )
1	2.1	74.3	72.3	67.8	64.8	570
4	3.8	65.3	63.3	55.8	52.8	552
8	5.3	60.8	58.8	49.7	46.7	546.7
10	5.9	59.3	57.3	47.8	44.8	545.4
16	7.5	56.2	54.2	43.7	40.7	543
20	8.4	54.8	52.8	41.8	38.8	542.1
25	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.
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

### Typical random certification test



UNTITLED.flw

# **How to Order**

CAT6A Lanpro Performax®, 48V, communications U/UTP cable, LP-CA020GRB solid 100% copper, CMR, grey color jacket, 1000 ft box.

CAT6A Lanpro Performax®, 48V, communications U/UTP cable, LP-CA020BLB solid 100% copper, CMR, blue color jacket, 1000 ft box.

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