#### LP-CA010BLB

LanPro Performax®, Unshielded Network Cable CAT 6A U/UTP, with blue color CM rated jacket, packed in 1000ft (305m) box

LPCA010BLB\_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 ≤ 48 Vrms.
- Exceeds ANSI/TIA-568-D, ISO/IEC 11801, IEC 60332-1C requirements.
- Comply IEEE 802.3an (10G-BaseT) and 802.3af/at (PoE full power specs).



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LanPro Performax®, Unshielded Network Cable CAT 6A U/UTP, with blue color CM 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-D, ISO/IEC 11801, making it ideal for transmission links supporting today's networking protocols up to 10G.



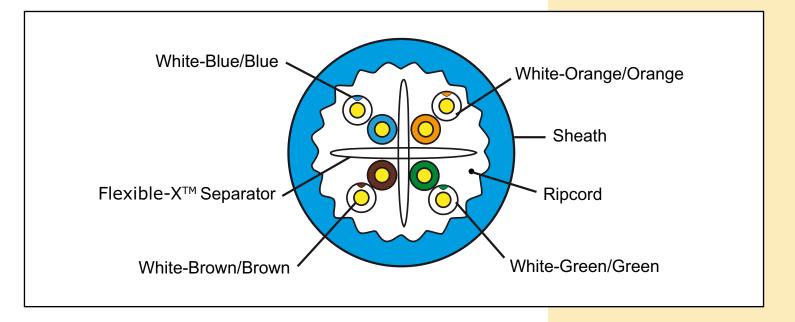
## Applications

LanPro Performax® LP-CA010BLB CAT 6A U/UTP Unshielded Network Cable, with blue color CM 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.

### Technical Specifications

Material   CM, complies with RoHS	Standards	ISO/IEC11801, TIA/EIA 568-D, IEC 60332-1C							
Nominal Diameter (mm)	Conductor	Material	100% Copper						
Nominal Diameter (mm)		AWG #	23	23					
Material   HDPE	Conductor	Nominal Diameter (mm)	0.570	Positive tolerance	+0.005				
Diameter (mm)   1.03±0.03   Thickness   0.65±0.05 mm   External Diameter, (O.D.)   6.9±0.4 mm   Surface finish   Clean   Material   CM, complies with RoHS   Color   Blue   Color   Black   Print error & Space   5±0.5%, 1m   Color   Print error & Space   5±0.5%, 1m   Surface finish   Surface finish   Color   Black   Print error & Space   5±0.5%, 1m   Surface finish   Surface fi		Norminal Diameter (mm)	0.570	Negative tolerance	-0.005				
Diameter (mm)   1.03±0.03	Teeletien laws:	Material	HDPE						
External Diameter, (O.D.)   6.9±0.4 mm	130lation layer	Diameter (mm)	1.03±0.03						
Surface finish   Clean     Material   CM, complies with RoHS     Color   Blue     Letter height   3.0±0.3 mm     Color   Black     Print error & Space   ≤±0.5%, 1m     Core Color   Black     Print error & Space   ≤±0.5%, 1m     1. Blue - White/Blue   2. Orange - White/Orange     3. Green - White/Green   4. Brown - White/Brown     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 (%)   ≥125     Cold bend (-20±2°C×4h) 8×Cable O.D. No visible cracks     Operating voltage   ≤48 Vrms     Temperature rating   75°C.     Safety toltage   1kv/Imin. (DC).     Mutual Capacitance   5.6 nF/100 M nom.     Pair to ground   330pF/100m max. at 20°C.     DC Resistance Unbalance   5% máx.     Characteristic Impedance   100±15 Ohm 1~500 MHz.     Propagation Delay skew   45 ns/100 m máx. 1~500 MHz.		Thickness	0.65±0.05 mm						
Material         CM, complies with RoHS           Color         Blue           Markings         Letter height         3.0±0.3 mm           Color         Black           Print error & Space         ≤ ±0.5%, 1m           Lore Color         1. Blue – White/Blue         2. Orange – White/Orange           3. Green – White/Green         4. Brown – White/Brown           Packing length           Bos           Packing length           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 (%)         ≥125         Cold bend (-20±2°C×4h) 8×Cable 0.D. No visible cracks           Mutual Capacitance rating         5.6 nF/100 M nom.           Pair to ground         330pF/100m max.           Characteristic Impedance         9.5 0hm/100m max. at 20°C.           DC Resistance Unbalance         5% máx.           Cha		External Diameter, (O.D.)	6.9±0.4 mm						
Color	Jacket Markings	Surface finish	Clean						
Letter height   3.0±0.3 mm		Material	CM, complies with RoHS						
Color		Color	Blue						
Print error & Space		Letter height	3.0±0.3 mm						
1. Blue		Color	Black						
Ricord   Some		Print error & Space	≤ ±0.5%, 1m						
3. Green - White/Green   4. Brown - White/Brown	Core Color	1. Blue- White/Blue	2. Orange - White/Orange						
Packing length   305±1.0m		3. Green - White/Green	4. Brown - White/Brown						
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 (%)       ≥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       5.6 nF/100 M nom.         Pair to ground       330pF/100m max.         Conductor DC resistance       9.5 Ohm/100m max. at 20°C.         DC Resistance Unbalance       5% máx.         Characteristic Impedance       100±15 Ohm 1~500 MHz.         Propagation Delay skew       45 ns/100 m máx. 1~500 MHz.	Packing	Box							
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 O.D. No visible cracks  Operating voltage ≤ 48 Vrms  Temperature rating 75°C.  Safety test voltage 1kv/1min. (DC).  Mutual Capacitance 5.6 nF/100 M nom.  Pair to ground 330pF/100m max.  Conductor DC resistance 9.5 Ohm/100m max. at 20°C.  DC Resistance Unbalance 5% máx.  Characteristic Impedance 100±15 Ohm 1~500 MHz.  Propagation Delay skew 45 ns/100 m máx. 1~500 MHz.	Packing length	305±1.0m							
Elongation (%)   ≥150	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 cracks         Operating voltage       ≤ 48 Vrms         Temperature rating       75°C.         Safety test voltage       1kv/1min. (DC).         Mutual Capacitance       5.6 nF/100 M nom.         Pair to ground       330pF/100m max.         Conductor DC resistance       9.5 Ohm/100m max. at 20°C.         DC Resistance Unbalance       5% máx.         Characteristic Impedance       100±15 Ohm 1~500 MHz.         Propagation Delay skew       45 ns/100 m máx. 1~500 MHz.		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 5.6 nF/100 M nom.  Pair to ground 330pF/100m max.  Conductor DC resistance 9.5 Ohm/100m max. at 20°C.  DC Resistance Unbalance 5% máx.  Characteristic Impedance 100±15 Ohm 1~500 MHz.  Propagation Delay skew 45 ns/100 m máx. 1~500 MHz.		Elongation (%)	≥150						
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Electrical characteristics 20°C  Electrical Conductor DC resistance  DC Resistance Unbalance  Characteristic Impedance  Propagation (%)  Elongation (%)  Cold bend (-20±2°C×4h) 8×Cable O.D. No visible cracks  Operating voltage  ≤ 48 Vrms  75°C.  1kv/1min. (DC).  Mutual Capacitance  5.6 nF/100 M nom.  330pF/100m max.  Conductor DC resistance  9.5 Ohm/100m max. at 20°C.  DC Resistance Unbalance  5% máx.  Characteristic Impedance  100±15 Ohm 1~500 MHz.  Propagation Delay skew  45 ns/100 m máx. 1~500 MHz.		After Aging Tensile Strength (Mpa)	≥12.5						
Pelectrical characteristics 20°C  Electrical characteristics 20°C  Conductor DC resistance DC Resistance Unbalance DC Resistance Unbalance DC Resistance DC		Elongation (%)	≥125						
Temperature rating 75°C.  Safety test voltage 1kv/1min. (DC).  Mutual Capacitance 5.6 nF/100 M nom.  Pair to ground 330pF/100m max.  Conductor DC resistance 9.5 Ohm/100m max. at 20°C.  DC Resistance Unbalance 5% máx.  Characteristic Impedance 100±15 Ohm 1~500 MHz.  Propagation Delay skew 45 ns/100 m máx. 1~500 MHz.		Cold bend (-20±2°C×4h) 8×Cable O.D. No visible cracks							
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Electrical characteristics 20°C  Mutual Capacitance  Pair to ground  Conductor DC resistance  DC Resistance Unbalance  Characteristic Impedance  Propagation Delay skew  5.6 nF/100 M nom.  330pF/100m max.  9.5 Ohm/100m max. at 20°C.  5% máx.  100±15 Ohm 1~500 MHz.  45 ns/100 m máx. 1~500 MHz.	characteristics	Temperature rating	75°C.						
Pair to ground 330pF/100m max.  Conductor DC resistance 9.5 Ohm/100m max. at 20°C.  DC Resistance Unbalance 5% máx.  Characteristic Impedance 100±15 Ohm 1~500 MHz.  Propagation Delay skew 45 ns/100 m máx. 1~500 MHz.		Safety test voltage	1kv/1min. (DC).						
Conductor DC resistance  DC Resistance Unbalance  Characteristic Impedance  Propagation Delay skew  Propagation Delay skew  SSOPY FORM Max.  9.5 Ohm/100m max. at 20°C.  5% máx.  100±15 Ohm 1~500 MHz.  45 ns/100 m máx. 1~500 MHz.		Mutual Capacitance	5.6 nF/100 M nom.						
Conductor DC resistance  DC Resistance Unbalance  Characteristic Impedance  Propagation Delay skew  9.5 Ohm/100m max. at 20°C.  5% máx.  100±15 Ohm 1~500 MHz.  45 ns/100 m máx. 1~500 MHz.		Pair to ground	330pF/100m max.						
DC Resistance Unbalance 5% máx.  Characteristic Impedance 100±15 Ohm 1~500 MHz.  Propagation Delay skew 45 ns/100 m máx. 1~500 MHz.		Conductor DC resistance	9.5 Ohm/100m max. at 20°C.						
Propagation Delay skew 45 ns/100 m máx. 1~500 MHz.		DC Resistance Unbalance	5% máx.						
		Characteristic Impedance	100±15 Ohm 1~500 MHz.						
Velocity of Propagation 69%		Propagation Delay skew	45 ns/100 m máx. 1~500 MHz.						
velocity of Fropagation		Velocity of Propagation	69%						

#### **Cable Structure**



#### 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

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