LP-C6MR0XXB LanPro Reliable® Unshielded CAT 6 U/UTP Network Cable, LSZH-rated Level 3, with Solid 100% Copper Conductors AWG 24 and Flexible-X™ Nylon core for symmetry in 1000 ft (305m) Easy Pull-Box.

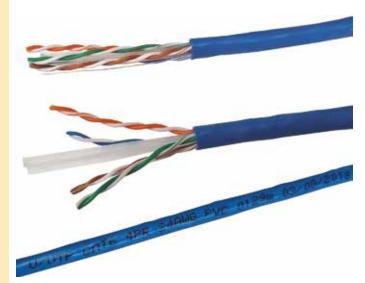
LPC6MR0XXB\_SS\_ENB01W

#### **Features**

- Ultra Flexible.
- Superior performance to traditional designs.
- 568-A and 568-B compatible.
- Exceeds ANSI/TIA-568-C.2, ISO/IEC 11801, IEC 60332-3. Vertical-Tray, CSA FT1 requirements.
- Rugged Construction.
- RipCord included.
- Backward compatible with CAT 5e and CAT 5 systems.
- Excellent price/performance ratio.
- Four (4) AWG 24 Twisted Pairs.
- Flame rating: LSZH Level 3 thermoplastic cover Jacket with a thickness of 0.55 mm.
- Reliable 6® is a robust product.
- Packaged in one convenient presentation: 1000 feet (305m) Easy-pull Box.
- The Geometry is better with Flexible-X<sup>™</sup> technology.
- Operating voltage: <48 Vrms.

### **Applications**

■ Unshielded LanPro Reliable® CAT 6 U/UTP Network LSZH-rated Level 3, is intended for 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.





### LP-C6MR0XXB

LanPro Reliable® Unshielded CAT 6 U/UTP Network Cable, LSZH-rated Level 3, with Solid 100% Copper Conductors AWG 24 and Flexible-X™ Nylon core for symmetry in 1000 ft (305m) Easy Pull-Box.

The LP-C6MR0XXB LanPro Reliable® Unshielded CAT 6 U/UTP Network Cable, LSZH-rated Level 3, with Solid 100% Copper Conductors AWG 24 with Flexible- $X^{TM}$  Nylon core for symmetry in 1000 ft (305m) Easy-Pull Box is the answer given by LanPro to the large demand imposed by today's high performance applications at reasonable prices.

Tested to well over 250 MHz, the guaranteed performance of this cable meets the ANSI/TIA-568-C.2, ISO/IEC 11801, IEC 60332-3, CSA FT1 requirements, making it ideal for transmission links supporting today's networking protocols.

The unshielded LanPro Reliable® CAT 6 U/UTP Network Cable is available for immediate delivery in blue, gray and violet color, other colors available under request.

Now with "Flexible- $X^{\text{TM}}$ " construction, Reliable® CAT 6 cable isolates and arranges the pairs throughout the length of the cable, improving field installation as well as performance.



# A Technical Specifications

	Makawial	Campa 1000					
	Material Copper 100%						
Conductor	AWG #	24					
	Nominal Diameter (mm)	0.50	Positive tolerance	+0.005			
	Norminal Diameter (mm)	0.50	Negative tolerance	-0.005			
	Material	HDPE (High D	Density Polyethylene)				
	Diameter (mm)	0.88±0.05					
Insulation	Color	A - Blue, White-Blue B - Orange, White-Orange C - Green, White-Green D - Brown, White-Brown					
Ripcord	Yes						
Separator	Flexible-X™						
Drain wire	None						
	Thickness	0.55±0.05 mm					
	External diameter (O.D.)	5.5±0.4 mm					
Jacket	Surface finish	Clean, FRAP, Satination					
	Material	LSZH Rated Level 3, complies RoHS					
	Color	Blue, Gray and Violet other colors under request					
	Type height	3.0±0.3 mm					
Markings	Color	Black					
	Print error & space	≤ ±0.5%, 1m					
	Wooden Tray & Carton						
Packaging	Product length	305 ± 1.5 m					
	Carton Dimensions	According to the requires					
Physical properties	Temperature Range	-20°C to 75°C					
	Tensile strength before Aging (Mpa)	≥13.5					
	Elongation before aging (%)	≥150					
Madhaniaal	Aging Period (°C x hours)	100°C x 24 h x 7d					
Mechanical characteristics	Tensile strength after Aging (Mpa)	≥12.5					
	Elongation after aging (%)	≥125					
	Cold Bend (-20±2°Cx4h)	No visible cracks					
	Bending Radius	8x external Dia. during install					
	Impedance (1.0 – 250.0 MHz)	100 ±15 Ohm					
Electrical Properties	Delay skew @20°C (1.0 - 250.0 MHz)	≤ 45 ns/100m					
(20°C	Maximum DC Resistance @ (20°C)	9.5 Ohm/100	m				
	% Resistance unbalance between conductors (Max)	alance between conductors 5 %					



# Certification





#### Cable ID: LANPRO-CAT6 24AWGG

Date / Time: 08/13/2018 02:18:29 PM Headroom 3.7 dB (NEXT 12-36) Test Limit: TIA Cat 6 Perm. Link Cable Type: Cat 6 U/UTP Calibration Date: 06/28/2018

Operator: LANPRO NETWORKS Software Version: 2.7800 Limits Version: 1.9500 NVP: 69.0%

### Test Summary: PASS

Model: DTX-1800 Main S/N: 9514069 Remote S/N: 9514070 Main Adapter: DTX-PLA002 Remote Adapter: DTX-PLA002

Length (ft), Limit 295	[Pair 45]	274
Prop. Delay (ns), Limit 498	[Pair 12]	420
Delay Skew (ns), Limit 44	[Pair 12]	17
Resistance (ohms)	[Pair 12]	15.3
Insertion Loss Margin (dB)	[Pair 12]	2.5
Frequency (MHz)	[Pair 12]	249.5
Limit (dB)	[Pair 12]	31.1

Insertion Loss Margin (dB)	PASS	MAIN	SR	MA	IN S	R
Frequency (MHz) [Pair 12] 249.5	Wo	rst Case	Margin	Wor	st Case V	alu
	Frequency (MHz)		i	Pair 12	2 249.5	5

Worst Pair	12-36	36-78	12-36	36-78
NEXT (dB)	3.7	4.8	3.7	4.8
Freq. (MHz)	240.5	230.5	240.5	230.5
Limit (dB)	35.6	35.9	35.6	35.9
Worst Pair	36	45	36	36
PS NEXT (dB)	3.4	5.5	3.4	6.6
Freq. (MHz)	240.0	61.3	240.0	230.5
Limit (dB)	33.0	42.8	33.0	33.3
PASS	MAIN	SR	MAIN	SR
Worst Pair	45-36	45-36	45-36	45-36
ACR-F (dB)	5.9	6.2	5.9	6.2
Freq. (MHz)	235.0	249.0	235.0	249.0
Limit (dB)	16.8	16.3	16.8	16.3
Worst Pair	78	36	78	36
PS ACR-F (dB)	8.1	7.8	8.2	7.8
Freq. (MHz)	219.5	249.0	248.0	249.0
Limit (dB)	14.4	13.3	13.3	13.3
N/Δ	MAIN	SR	MAIN	SR

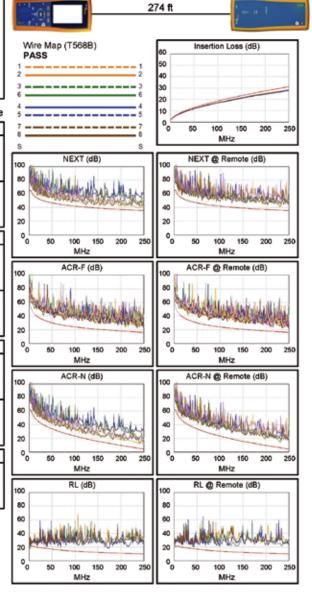
N/A	MAIN	SR	MAIN	SR
Worst Pair	36-45	36-45	12-36	36-78
ACR-N (dB)	5.5	6.0	6.8	7.8
Freq. (MHz)	18.4	16.9	243.5	230.5
Limit (dB)	46.1	47.0	4.9	6.2
Worst Pair	36	45	36	36
PS ACR-N (dB)	5.7	6.7	7.0	9.6
Freq. (MHz)	17.3	61.3	243.5	230.5
Limit (dB)	44.4	28.6	2.3	3.6
PASS	MAIN	SR	MAIN	SR

ı	LITTIK (GB)	44.4	20.0	2.3	3.0
I	PASS	MAIN	SR	MAIN	SR
ı	Worst Pair	45	45	45	45
ı	RL (dB)	2.5	2.6	6.3	2.6
ı	Freq. (MHz)	17.0	42.8	173.0	42.8
ı	Limit (dB)	19.8	17.7	11.6	17.7
1					

Compliant Network Standards: 10BASE-T 100BAS 1000BASE-T ATM-25 100BASE-TX ATM-25

ATM-155 TR-16 Active 100VG-AnyLan TR-16 Passive

100BASE-T4 ATM-51



LinkWare™ PC Version 9.3 Site: LANPRO LABS

Project: LANPRO TESTING Untitled1

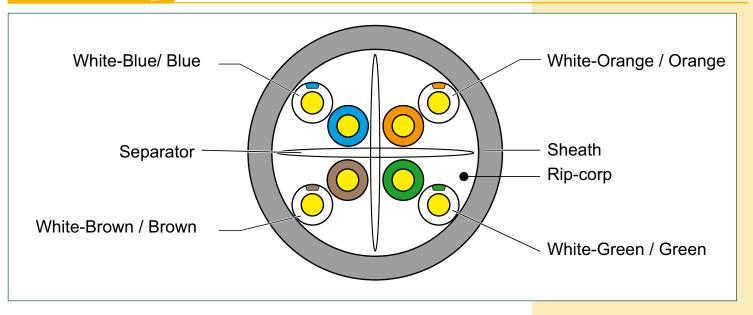




# Certification Characteristics

Freq.(MHz)	RL > dB	ATT ≤dB	NEXT ≥dB	Retraso ≤ns	PSNEXT > dB	ELFEXT > dB	PSELFEXT ≥ dB
1	19.1	3.0	65.0	570.0	62.0	64.2	61.2
4	21.0	3.5	64.1	552.0	61.8	52.1	49.1
8	21.0	5.0	59.4	546.7	57.0	46.1	43.1
10	21.0	5.5	57.8	545.4	55.5	44.2	41.2
16	20.0	7.0	54.6	543.0	52.2	40.1	37.1
20	19.5	7.9	53.1	542.1	50.7	38.2	35.2
25	19.0	8.9	51.5	541.2	49.1	36.2	33.2
31.25	18.5	10.0	50.0	540.4	47.5	34.3	31.3
62.5	16.0	14.4	45.1	538.6	42.7	28.3	25.3
100	14.0	18.6	41.8	537.6	39.3	24.2	21.2
200	11.0	27.4	36.9	536.5	34.3	18.2	15.2
250	10.0	31.1	35.3	536.3	32.7	16.2	13.2

# Structure



### How to order

LP-C6MR0BLB LanPro Reliable® Unshielded CAT 6 U/UTP Network Cable, LSZH-rated Level 3, with Solid 100% Copper Conductors AWG 24 and Flexible-X™ Nylon core for symmetry and blue jacket in 1000 ft (305m) Easy Pull-Box.

LP-C6MRJ0VLB LanPro Reliable® Unshielded CAT 6 U/UTP Network Cable, LSZH-rated Level 3, with Solid 100% Copper Conductors AWG 24 and Flexible-X™ Nylon core for symmetry and violet jacket in 1000 ft (305m) Easy Pull-Box.