

**LP-C6E10GRB LanPro Reliable® Unshielded CAT 6 U/UTP Network Cable, CM rated with Solid 100% Copper Conductors, 0.54mm Nominal Diameter and Flexible-X™ Nylon core for symmetry and gray jacket in 1000 ft (305m) Easy Pull-Box.**

LPC6E10GRB\_SS\_ENB01W

**Features**

- Very Flexible.
- Superior performance to traditional designs.
- 568-A and 568-B compatible.
- Exceeds ANSI/TIA-568-C.2, ISO/IEC 11801, CSA FT1 requirements.
- Rugged Construction.
- Ripcord included.
- Backward compatible with CAT 5e and CAT 5 systems.
- Excellent price/performance ratio.
- Gray color jacket.
- Four (4) Twisted Pairs, Nominal Diameter 0.54mm.
- Flame rating: CM thermoplastic cover Jacket with a thickness of 0.55 mm.
- Reliable 6® is a robust product.
- Packaged in one convenient presentation: 1000 feet (305m) in a Easy Pull-Box.
- The Geometry is better with Flexible-X™ technology.
- Operating voltage: <48 Vrms.
- ETL No. 105118692CRT-001a.



*EUROStyle*

**LP-C6E10GRB  
LanPro Reliable® Unshielded CAT 6 U/UTP Network Cable,  
CM rated with Solid 100% Copper Conductors, 0.54mm  
Nominal Diameter and Flexible-X™ Nylon core for symmetry  
and gray jacket in 1000 ft (305m) Easy Pull-Box.**

The LP-C6E10GRB LanPro Reliable® Unshielded CAT 6 U/UTP Network Cable, CM rated with Solid 100% Copper Conductors, 0.54mm Nominal Diameter with Flexible-X™ Nylon core for symmetry and gray jacket 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, CSA FT1 requirements, ETL registered No. 105118692CRT-001a, making it ideal for transmission links supporting today's networking protocols.

ETL certified for CM commercial applications, the unshielded LanPro Reliable® CAT 6 U/UTP Network Cable is available for immediate delivery in gray color, other colors available under request. Now with "Flexible-X™" construction, Reliable® CAT 6 cable isolates and arranges the pairs throughout the length of the cable, improving field installation as well as performance.

**A Applications**

Unshielded LanPro Reliable® CAT 6 U/UTP Network CM rated 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.

## B Technical Specifications

<b>Standards</b>	ISO/IEC11801, TIA/EIA 568.C-2, ETL No. 105118692CRT-001a			
<b>1.- Conductor</b>	Material	100% Cooper		
	Nominal Diameter (mm)	0.540	Positive tolerance	+ 2%
			Negative tolerance	- 2%
<b>2.- Isolation layer</b>	Material	HDPE (High Density Polyethylene)		
	Diameter (mm)	0.98±0.03		
	Color	A-Blue, White-Blue	B-Orange, White-Orange	
		C-Green, White-Green	D-Brown, White-Brown	
<b>3.- Ripcord</b>	Yes			
<b>4.- Separator</b>	Flexible -X™			
<b>5.- Drain wire</b>	None			
<b>6.- Jacket</b>	Thickness	0.55±0.05 mm		
	External diameter (O.D.)	6.0±0.4 mm		
	Surface finish	Clean, FRAP, Satinized		
	Material	CM Rated, complies RoHS		
	Color	gray		
<b>7.- Markings</b>	Type height	3.0±0.3 mm		
	Color	Black		
	Print error & space	≤ ±0.5%, 1m		
<b>8.- Packaging</b>	Easy Pull-Box type Carton, Pallet			
	Product length	305 ± 1.5 m		
	Carton Dimensions	40.5cm x 40.5cm x 21cm		
<b>9.- Physical properties</b>	Temperature Range	-20°C to 75°C		
<b>10.- Mechanical characteristics</b>	Tensile strength before Aging (Mpa)	≥13.5		
	Elongation before aging (%)	≤150		
	Aging Period (°C x hours)	100°C x 24 h x 7d		
	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		
4x external Dia. afterwards				
<b>11.- Electrical Properties (20°C)</b>	Zo (1.0 – 250.0 MHz)	100 ±15 Ohm		
	Delay skew @20°C (1.0 – 250.0 MHz)	≤ 45 ns/100m		
	Maximum DC Resistance @ (20°C)	9.5 Ohm/100 m		
	% Resistance unbalance between conductors (Max)	5 %		

**Certification**



**Cable ID: TIA-0001**

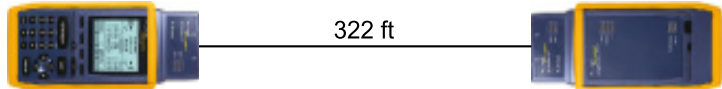
Date / Time: 09/03/2016 01:24:00 PM  
 Headroom **2.7 dB (NEXT 36-78)**  
 Test Limit: **Cat 6 Chan**  
 Cable Type: LanProCat6-New

Operator: LanPro America  
 Software Version: V06.12  
 NVP: 65.0%

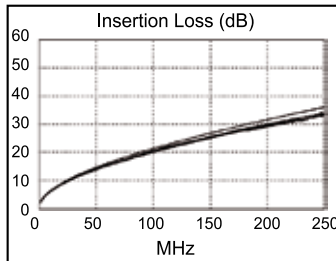
**Test Summary: PASS**

Model: OMNIScanner2  
 Main S/N: 50D04C00038  
 Remote S/N: 50E04C00019  
 Main Adapter: PM06  
 Remote Adapter: PM06

Wire Map	Expected	Actual
<b>PASS</b>	omni: 12345678	12345678
	rem.: 12345678	12345678

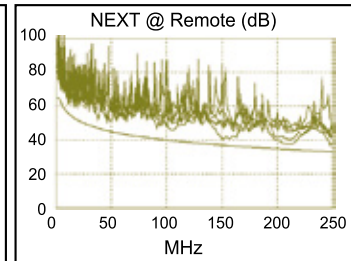
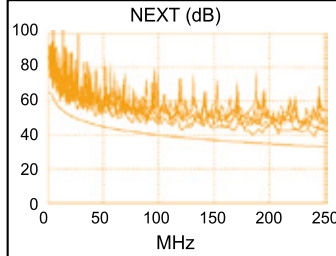


Length (ft), Limit 328	[Pair 78]	322
Prop. Delay (ns), Limit 555	[Pair 36]	521
Delay Skew (ns), Limit 50	[Pair 36]	17
Resistance (ohms)		N/A
Insertion Loss Margin (dB)	[Pair 45]	1.3
Frequency (MHz)	[Pair 45]	247.0
Limit (dB)	[Pair 45]	35.7

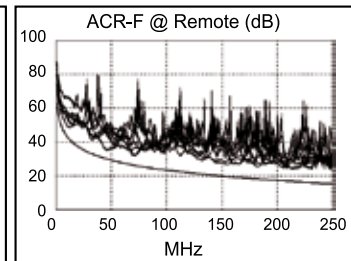
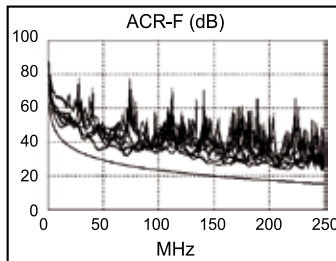


**Worst Case Margin Worst Case Value**

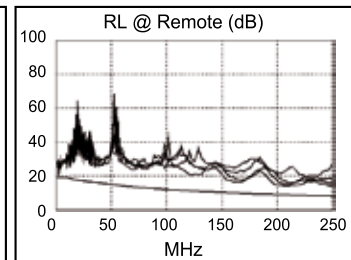
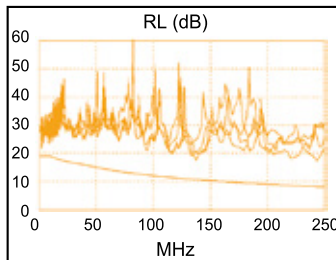
<b>PASS</b>	MAIN	SR	MAIN	SR
Worst Pair	45-78	36-78		
<b>NEXT (dB)</b>	4.1	2.7		
Freq. (MHz)	186.3	151.6		
Limit (dB)	35.4	36.8		
Worst Pair	78	78		
<b>PS NEXT (dB)</b>	5.4	4.7		
Freq. (MHz)	121.9	151.6		
Limit (dB)	35.6	34.0		



<b>PASS</b>	MAIN	SR	MAIN	SR
Worst Pair	45-12	12-45		
<b>ACR-F (dB)</b>	4.8	4.8		
Freq. (MHz)	45.5	45.5		
Limit (dB)	30.2	30.2		
Worst Pair	12	12		
<b>PS ACR-F (dB)</b>	7.0	6.4		
Freq. (MHz)	70.9	68.7		
Limit (dB)	23.2	23.6		



<b>PASS</b>	MAIN	SR	MAIN	SR
Worst Pair	78	45		
<b>RL (dB)</b>	5.8	4.5		
Freq. (MHz)	3.2	3.2		
Limit (dB)	19.0	19.0		



Compliant Network Standards:  
 10BASE-T      100BASE-TX      100BASE-T4  
 1000BASE-T    ATM-25            ATM-51  
 ATM-155      100VG-AnyLan    TR-4  
 TR-16 Active    TR-16 Passive

LinkWare™ PC Version 9.3

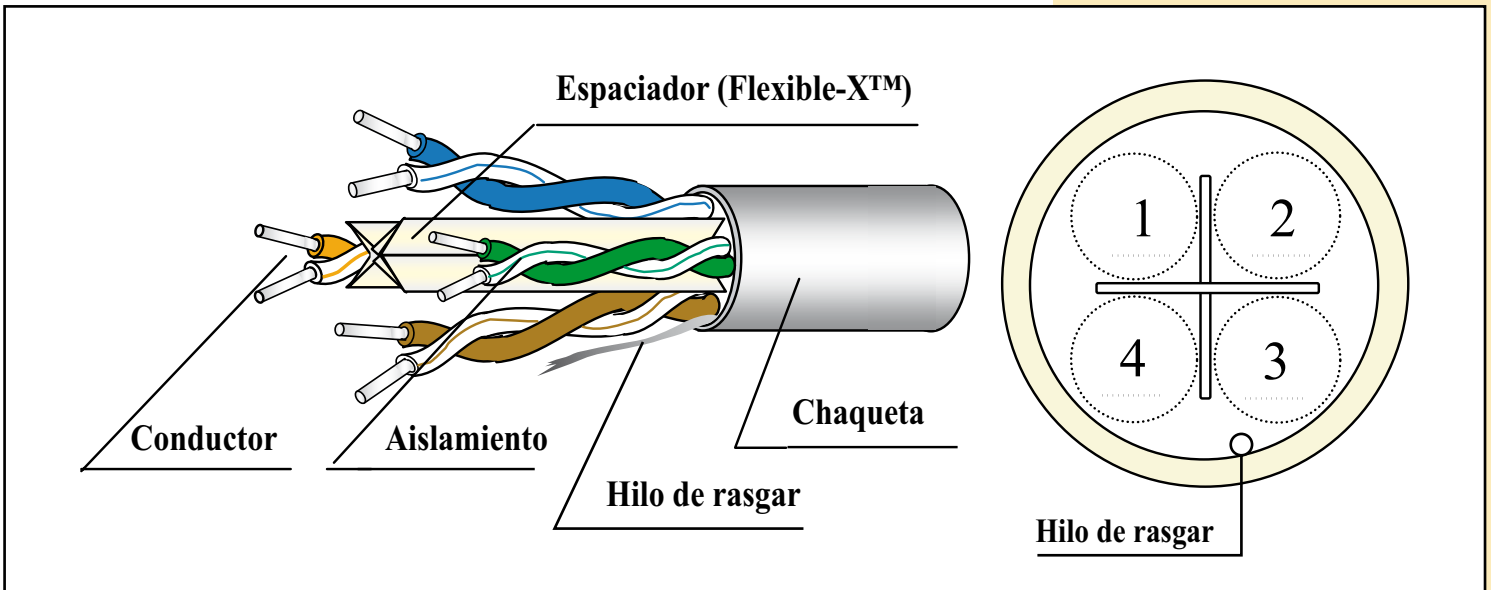
Project: LanProCAT6-NEW



**D Certification Characteristics**

Freq.(MHz)	RL >dB	ATT ≤dB	NEXT ≥dB	DELAY ≤ns	PSNEXT >dB	ELFEXT >dB	PSELFEXT ≥dB
1	20.0	2.03	74.3	570.00	72.3	67.8	64.8
4	23.0	3.78	65.3	552.00	63.3	55.8	52.8
8	24.5	5.32	60.8	546.73	58.8	49.7	46.7
10	25.0	5.95	59.3	545.38	57.3	47.8	44.8
16	25.0	7.55	56.2	543.00	54.2	43.7	40.7
20	25.0	8.47	54.8	542.05	52.8	41.8	38.8
25	24.3	9.51	53.3	541.20	51.3	39.8	36.8
31.25	23.6	10.67	51.9	540.44	49.9	37.9	34.9
62.5	21.5	15.38	47.7	538.55	45.4	31.9	28.9
100	20.1	19.80	44.3	537.60	42.3	27.8	24.8
200	18	28.98	39.8	536.64	37.8	21.8	18.8
250	17.3	32.85	38.3	536.27	36.3	19.8	16.8

**E Structure**



**F How to order**

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