

LP-C6E20GRB LanPro Reliable® Unshielded CAT 6 U/UTP Network Cable, CMR-rated with Solid 100% Copper Conductors 0.54mm Nominal Diameter and Flexible-X™ Nylon core for symmetry and gray jacket in 1000 ft (305m) REELEX II® Easy Pull-Box.

LPC6E20GRB_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, UL 1666.
- Rugged Construction.
- RipCord included.
- Backward compatible with CAT 5e and CAT 5 systems.
- Excellent price/performance ratio.
- Gray color jacket.
- Four (4) Twisted Pairs, 0.54mm Nominal Diameter.
- Flame rating: CMR 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 REELEX II® easy-pull Box.
- The Geometry is better with Flexible-X™ technology.
- Operating voltage: <48 Vrms.
- UL E329019.



LP-C6E20GRB

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

The LP-C6E20GRB LanPro Reliable® Unshielded CAT 6 U/UTP Network Cable, CMR-rated with Solid 100% Copper Conductors 0.54mm Nominal Diameter with Flexible-X™ Nylon core for symmetry and gray jacket in 1000 ft (305m) REELEX II® 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.2-1, ISO/IEC 11801, UL 444, and UL 1666 requirements, UL registered E329019, making it ideal for transmission links supporting today's networking protocols.

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

CMR rated Category 6 U/UTP cable is intended for high speed data applications, including 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, suitable 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 6 CMR Reliable® 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.

When taking fire, CMR cables generate fumes that contain these halides which react with water present in the environment and producing hydrochloric acid, a very irritant mist that produces suffocation when inhaled. LanPro recommends caution on the use of CMR in public places.



B Technical Specifications

STANDARDS	ISO/IEC11801, TIA/EIA 568.C-2, UL 1666			
Conductor	Material	Cooper 100%		
	Nominal Diameter (mm)	0.540	Positive tolerance	+0.005
			Positive tolerance	-0.005
Isolation layer	Material	HDPE (Polietileno de alta densidad)		
	Diameter (mm)	0.95±0.03		
	Color	A - Blue, White-Blue B - Orange, White-Orange C - Green, White-Green D - Brown, White-Brown		
Rip Cord	Yes			
Separator	Flexible-X™			
Drain wire	None			
Jacket	Thickness	0.55±0.05 mm		
	External diameter (O.D.)	6.1±0.4 mm		
	Surface finish	Clean, FRAP, Satinized		
	Material	CMR Rated, complies RoHS		
	Color	Gray		
Markings	Type height	3.0±0.3 mm		
	Color	Black		
	Print error & space	≤ ±0.5%, 1m		
Packaging	REELEX II® type Carton, Pallet			
	Product length	305 ± 1.5 m		
	Carton Dimensions	40.5cm x 40.5cm x 21cm		
Physical properties	Temperature Range	-20°C a 75°C		
Electrical Properties (20°C)	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 Technical Specifications

STANDARDS	ISO/IEC11801, TIA/EIA 568.C-2, UL 1666	
Electrical Properties (20°C)	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 %

C Certification

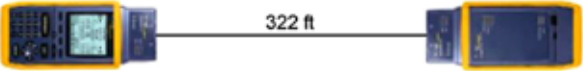



Cable ID: TIA-0001
 Date / Time: 09/03/2016 01:24:00 PM
 Headroom 2.7 dB (NEXT 36-78)
 Test Limit: Cat 6 Chan
 Cable Type: LanProCat6-New

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
PASS	omni.: 12345678	12345678
	rem.: 12345678	12345678



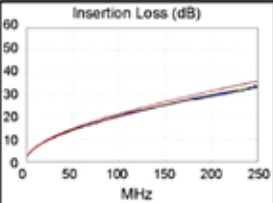
322 ft

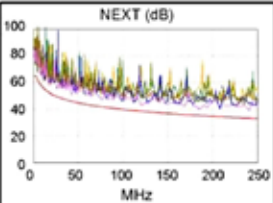
Length (ft), Limit 328	[Pair 78]	322
Prop. Delay (ns), Limit 555	[Pair 36]	521
Delay Skew (ns), Limit 50	[Pair 36]	17
Resistance (ohms)		N/A
Insertion Loss Margin (dB)	[Pair 45]	1.3
Frequency (MHz)	[Pair 45]	247.0
Limit (dB)	[Pair 45]	35.7

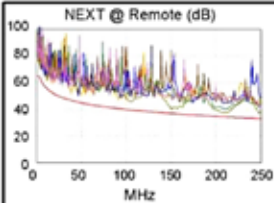
	Worst Case Margin		Worst Case Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	45-78	36-78		
NEXT (dB)	4.1	2.7		
Freq. (MHz)	186.3	151.6		
Limit (dB)	35.4	36.8		
Worst Pair	78	78		
PS NEXT (dB)	5.4	4.7		
Freq. (MHz)	121.9	151.6		
Limit (dB)	35.6	34.0		

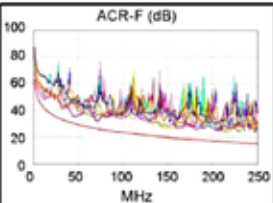
	Worst Case Margin		Worst Case Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	45-12	12-45		
ACR-F (dB)	4.8	4.8		
Freq. (MHz)	45.5	45.5		
Limit (dB)	30.2	30.2		
Worst Pair	12	12		
PS ACR-F (dB)	7.0	6.4		
Freq. (MHz)	70.9	68.7		
Limit (dB)	23.2	23.6		

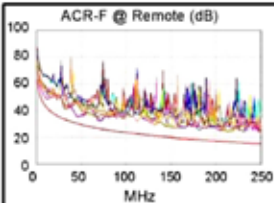
	Worst Case Margin		Worst Case Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	78	45		
RL (dB)	5.8	4.5		
Freq. (MHz)	3.2	3.2		
Limit (dB)	19.0	19.0		

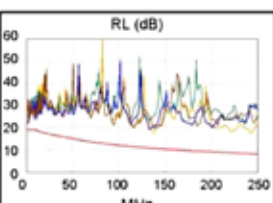


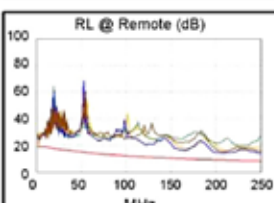













Compliant Network Standards:

10BASE-T	100BASE-TX	100BASE-T4
100BASE-T	ATM-25	ATM-51
ATM-155	100VG-AnyLan	TR-4
TR-16 Active	TR-16 Passive	

Project: LanProCAT6-NEW

LinkWare™ PC Version 9.3



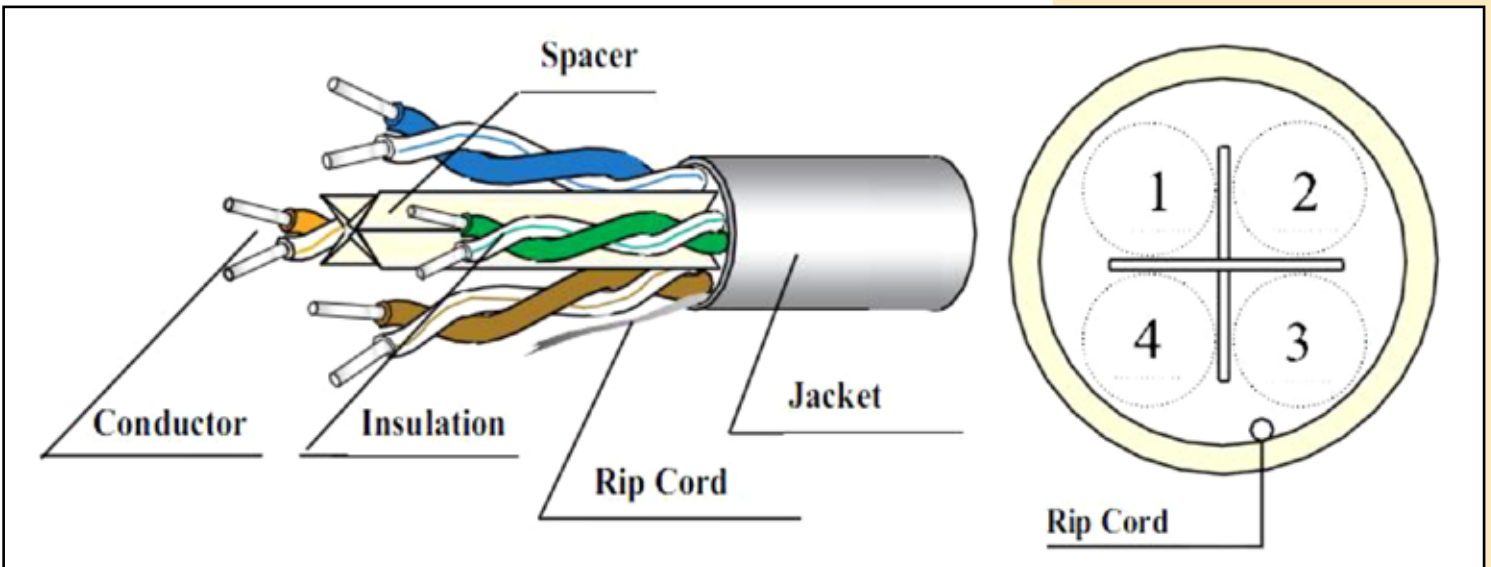
3

www.lanpro.com

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

LP-C6E20GRB LanPro Reliable® Unshielded CAT 6 U/UTP Network Cable, CMR-rated with Solid 100% Copper Conductors 0.54mm Nominal Diameter and Flexible-X™ Nylon core for symmetry and gray jacket in 1000 ft (305m) REELEX II® Easy Pull-Box.