# SLANPRO

# **Cabling Systems - Copper Solutions**

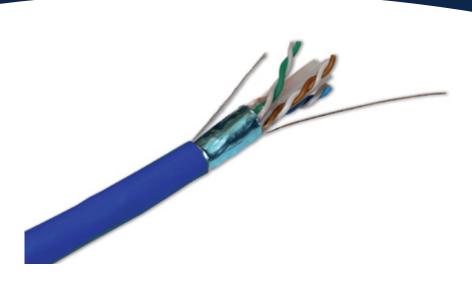
LP-C6300BLC LanPro Reliable® CAT 6 type F/UTP Shielded Network Cable, CMX-rated with Solid Copper Conductors and Flexible-X<sup>™</sup> separator for symmetry and Blue jacket in 1000 ft (305 m) wood spool.

LPC6300BLC\_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 VW-1 requirements.
- Shielded F/UTP.
- Rip Cord included.
- Drain Wire included.
- Backward compatible with CAT 5e and CAT 5 systems.
- Excellent price/performance ratio.
- Blue color jacket.
- Four (4) 23 AWG Twisted Pairs.
- Flame rating: CMX thermoplastic cover Jacket with a thickness of 0.60 mm.
- Reliable<sup>™</sup> CAT 6 is a robust product.
- Packaged in one convenient presentation: 1000 feet (305 m) wood spool.
- Weight: 32 lb (14.5 Kg).
- The Geometry is better with Flexible-X<sup>™</sup> technology.
- Operating voltage: <48 Vrms.

UL E329019.



## LP-C6300BLC LanPro Reliable® CAT 6 type F/UTP Shielded Network Cable, CMX-rated with Solid Copper Conductors and Flexible-X<sup>™</sup> separator for symmetry and Blue jacket in 1000 ft (305 m) wood spool.

LanPro Reliable® CAT 6 F/UTP Network CMX-rated general purpose Cable is the answer given by LanPro to the 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, UL VW-1 requirements, UL registered E329019, making it ideal for transmission links supporting today's networking protocols.

## Applications:

Shielded LanPro Reliable® CAT 6 **LP-C6300BLC** F/UTP Network CMX-rated 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 suveillance IP cameras and 100BASE-TX and 4/16 Mb/s Token Ring.

### **IMPORTANT NOTE:**

Shielded LanPro Reliable® **LP-C6300BLC** CAT 6 F/UTP Network CMX-rated belongs to a class of General Purpose cables, and may be used anywhere in Residential areas or inside conduits in commercial areas. The cables are flame tested and held to a lower standard than CM, Riser or Plenum cables. The chemicals used to produce such stopping of fire propagation need substances that have high quantities of halides.

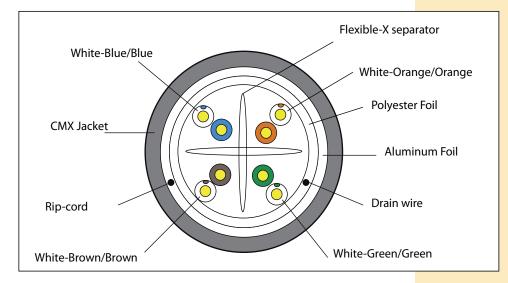
When taking fire, CMX cables generate fumes that contain these halides which react with water present in the environment and producing hydrochloric acid, a very irritant mist that produces suffocation when inhaled. LanPro recommends caution on the use of CMX in public places.

# **B** Technical Specifications:

Standards	ISO/IEC11801, TIA/EIA 568.2, EN 5017	73, UL approv	ed E329019					
	Material	Copper 100%						
1 Conductor	AWG #	23	23					
		0.570	Positive tolerance	Positive tolerance +				
	Nominal Diameter (mm)		Negative tolerand	ce	-0.005			
2 Isolation layer	Material	HDPE (High Density Polyethylene)						
	Diameter (mm)	$1.09 \pm 0.02$						
	Elongation	Min. 300%						
		A- Blue, White-Blue B- Orange, Whi			e, White-Orange			
	Color	C- Green, White-Green D- Brow			, White-Brown			
3 Rip Cord	Yes							
4 Separator	Flexible −X <sup>™</sup>							
5 Drain Wire	Yes							
6 Jacket	Thickness	0.60 ± 0.05 mm						
	External Diameter, (O.D.)	7.4 ± 0.4 mm						
	Surface finish	Clean, Sat	Clean, Satinized					
	Material	CMX, com	CMX, complies RoHS					
	Color	Blue	Blue					
	Type height	3.0 ± 0.3	3.0 ± 0.3 mm					
7 Markings	Color	Black	Black					
	Print error & Space	$\leq \pm 0.5\%$	≤ ± 0.5%, 1 m					
	Wood Spool							
8 Packaging	Product length	305 ± 1.5 m						
	Weight	32 lb (14.5 Kg)						
9 Physical properties	Temperature Range	-20 °C to 75 °C						
	Tensile strength before Aging (Mpa)	≥ 13.5	≥ 13.5					
	Elongation before aging (%)	≥ 150						
	Aging Period (°C x hours)	100 °C x 2	100 ºC x 24 h x 7d					
10 Mechanical Characteristics	Tensile strength after Aging (Mpa)	≥ 12.5						
	Elongation after aging (%)	≥ 125	≥ 125					
	Cold Bend (-20 $\pm$ 2 °C x 4h)	No visible	No visible cracks					
	Bending Radius	8 x external Dia. during install,						
		4 x external Dia. afterwards						
	Isolation resistance @500 V		Min 5000 MΩ/Km					
	Zo (1.0 – 250.0 MHz)		100 ± 15 Ω					
	Delay skew @20ºC (1.0 – 250.0 MHz)		≤ 45(ns/100m)					
	Propagation Velocity (% C)	69%	69%					
	Mutual capacitance	5.6 nF ma	5.6 nF max/100 m					
11 Electrical properties	Capacitance imbalance		330 nF max/100 m					
@ 20 °C	Maximum DC Resistance @ (20 °C)	9.38 Ω/100 m						
	Delay [ns/100m] @250 MHz	536 ns						
	% Resistance unbalance between conductors (Max)	5 %						
	Maximum Operating RMS AC Voltage	≤ 48	≤ 48					
	Peak Operating Voltage (DC)	≤ 68 V						
	(DC) Test Voltage (1 minute)	1.0 KV/ 1	1.0 KV/ 1 minute					

## Structure

C



# 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	65.0	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	41.3	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	18.0	28.98	39.8	536.54	37.8	21.8	18.8
250	17.3	32.85	38.3	536.27	36.3	19.8	16.8

## How to Order:

F

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