

# LP-CA7I0VLC01 Shielded CAT 6A U/FTP Network Cable Low Smoke Zero-Halogen

LP-CA7I0VLC01\_SS\_ENB01W

## Features

- Specified and tested to well over 500 MHz.
- Lower Bit Error Rates increases network efficiency and uptime.
- Very flexible, reduces installation costs and maintenance.
- Superior performance to traditional designs.
- 568A and 568B compatible.
- Rugged construction.
- Backward compatible with CAT 6 and CAT 5e systems.
- Excellent price/performance ratio.
- Available in violet color.
- 4 pairs of 23 AWG, 100% copper.
- Jacket: LSZH. (Low Smoke Zero-Halogen).
- Exceeds ISO/IEC 11801, ANSI/TIA/EIA-568-C.2, UL-444, CSA 22.2 No. 214-08 (7/11/2008).
- Flame Rating: IEC 60332-3C.
- Performax® is a robust product.
- Packaged in one convenient 1000 feet (305 ± 1.5 m) wood spool.
- Operating voltage ≤ 48 Vrms.
- Comply IEEE 802.3an (10G-BaseT) and 802.3af/at (PoE full power specs).

## Applications

- Category 6A U/FTP cable is intended for high speed data applications including: 10G BASE-T, 10GBASE-TX, 155 Mb/s ATM, 4/16 Mb/s Token Ring.



**PERFORMAX**

Flexible  
X™

10G

48V

75°C

LSZH

EC  
VERIFIED

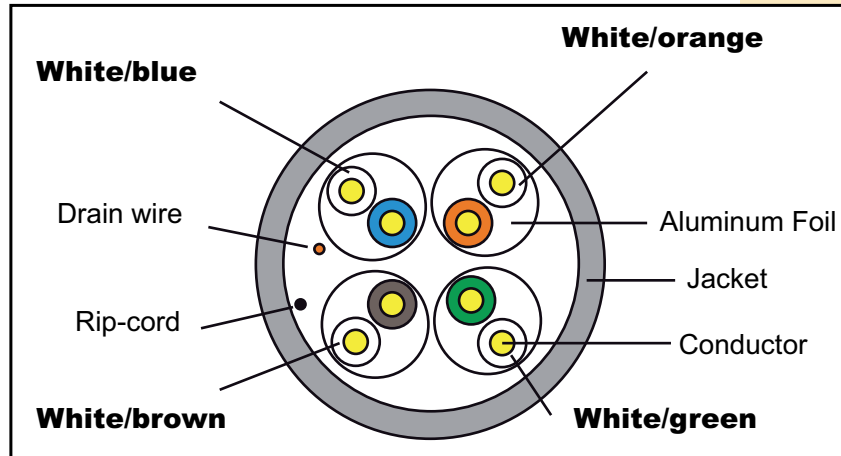
## LP-CA7I0VLC01 Shielded CAT 6A U/FTP Network Cable Low Smoke Zero-Halogen.

Performax® CAT 6A U/FTP cable, IEC 60332-3C compliant is the answer given by LanPro to the 10G channel demand imposed by today's high performance applications at reasonable prices. Available under special order only. Tested to well over 500 MHz, the guaranteed performance of this cable meets the ANSI/TIA-568-C.2 and ISO/IEC 11801 requirements, making it ideal for high-end transmission links supporting today's networking protocols.

Additionally, the LSZH LanPro cable protects people against poisonous gases when it burns. Typically a PVC cable emits 28% of hydrogen chloride producing greater volumes of toxic fumes, but with the LSZH cable the emission is approximately 0.5% of hydrogen chloride. If the installation is in a public building such as hospitals, prisons, airports, schools, shopping malls, apartment buildings, theaters, etc. you should be very careful with the kind of cable selected. The only way of ensuring the safety of people is to specify LanPro LSZH cable.



## A Specifications



### Construction Type:

U/FTP 23 AWG 0.57 mm (0.023 in.) bare 100% copper wire insulated with polyethylene. Two insulated conductors twisted together to form a pair shielded with foil and four such cabled pairs to form the basic unit jacketed with flame-retardant IEC 60332-3C material.

### Twisted Pairs Color Code:

PAIR 1: Blue, White  
 PAIR 2: Orange, White  
 PAIR 3: Green, White  
 PAIR 4: Brown, White

### Mylar-Backed Aluminium Foil Tape:

Overall screened construction ensures virtually zero alien crosstalk enclosing a 0.57 mm (0.22 in.) (23 AWG) tinned copper drain wire.

### Rip Cord:

For easy stripping.

### Drain Wire:

In order to reinforce the UL-444 regulation as well as shielding integrity along the whole length of the cable, a tinned plated drain wire is supplied. In this way the integrity of the grounding is assured at any time or situation.

### Cable Diameter:

7.4mm max cable jacket diameter provides better pathway fill over larger 10Gb/s U/FTP cables.

### Standards Compliant:

ISO/IEC 11801, ANSI/TIA/EIA-568-C.2, CSA 22.2 No. 214-08 (7/11/2008).IEC 60332-3C rated.

## ● Physical Characteristics

Before Aging:

1. Tensile strength (Mpa):  $\geq 10.0$ .
2. Elongation (%):  $\geq 125$ .

Period Aging ( $^{\circ}\text{C}$  x hrs):  $100^{\circ}\text{C}$  x 24hx7d.

After Aging:

1. Tensile strength (Mpa):  $\geq 8.0$ .
2. Elongation (%):  $\geq 100$ .

## ● Component

1. Conductor: AWG 23 (0.570 ± 0.005 mm, 100% copper).
2. Insulators: Skin-Foam-Skin (PE).
3. Insulators Diameter: 1.350 ± 0.05 mm.
4. Al-Mylar Tape: 65u\*12.5 mm.
5. Jacket: 90°C (Thickness 0.55 ± 0.05 mm).
6. Jacket Diameter: 7.4 ± 0.5 mm.
7. Material: LSZH.

**Note:** All versions have a ripcord. All foil shielded versions have a drain wire.

## ● Electric Characteristics

1. Operating voltage: ≤ 48 Vrms.
2. Temperature rating: 75°C.
3. Safety test voltage: 1kv/1min. (DC).
4. Mutual Capacitance: 5.6 nF/100 m nom.
5. Pair to ground: 330pF/100m max.
6. Conductor DC resistance: 89 Ohm/Km max. at 20°C.
7. DC Resistance Unbalance: 2% max.
8. Characteristic Impedance: 100±15 Ohm 1~500 MHz.
9. Propagation Delay skew: 45 ns/100 m max. 1~500 MHz.
10. Velocity of Propagation: 74%.

FREQ	Insertion Loss	NEXT	RL	PSNEXT	ACRF	PSACRF	DELAY
MHz	(max. dB/100m)	(min. dB)	(min. dB at 20..)	(min. dB)	(min. dB)	(min. dB)	(ns/100 m)
1	2.1	74.3	20.0	72.3	67.8	64.8	570
4	3.8	65.3	23.0	63.3	55.8	52.8	552
8	5.3	60.8	24.5	58.8	49.7	46.7	547
10	5.9	59.3	25.0	57.3	47.8	44.8	545
16	7.5	56.2	25.0	54.2	43.7	40.7	543
20	8.4	54.8	25.0	52.8	41.8	38.8	542
25	9.4	53.3	24.3	51.3	39.8	36.8	541
31.25	10.5	51.9	23.6	49.9	37.9	34.9	540
62.5	15.0	47.4	21.5	45.4	31.9	28.9	539
100	19.1	44.3	20.1	42.3	27.8	24.8	538
200	27.6	39.8	18.0	37.8	21.8	18.8	537
250	31.1	38.3	17.3	36.3	19.8	16.8	536
300	34.3	37.1	16.8	35.1	18.3	15.3	536
400	40.1	35.3	15.9	33.3	15.8	12.8	536
500	45.3	33.8	15.2	31.8	13.8	10.8	536

● **Typical random certification test**



**Cable ID: LANPRO-UFTP-CAT6A-C**

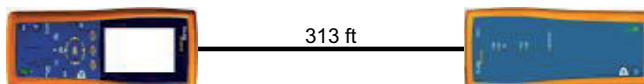
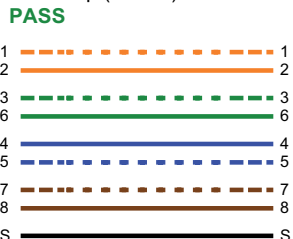
**Test Summary: PASS**

Date / Time: 01/14/2013 10:17:13am  
**Headroom: 8.4 dB (NEXT 36-45)**  
**Test Limit: TIA Cat 6A Channel**  
 Cable Type: Cat 6A FTP

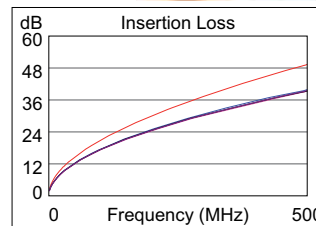
Operator: LanPro  
 Software Version: 2.5200  
 Limits Version: 1.7000  
 NVP: 74.0%

Model: DTX-1800  
 Main S/N: 9485115  
 Remote S/N: 9485116  
 Main Adapter: DTX-CHA001  
 Remote Adapter: DTX-CHA001

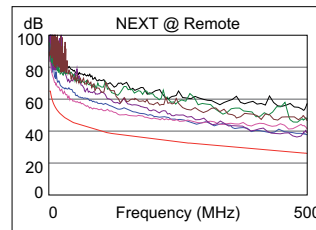
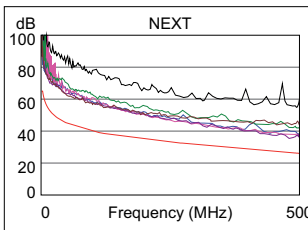
Wire Map (T568B)



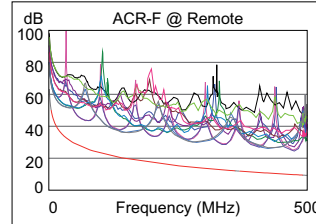
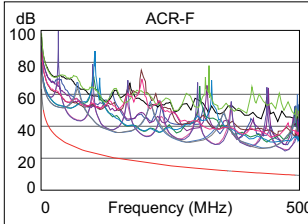
Length (ft), Limit 328	[Pair 45]	313
Prop. Delay (ns), Limit 555		445
Delay Skew (ns), Limit 50		15
Resistance (ohms)	[Pair 12]	14.8
Insertion Loss Margin (dB)	[Pair 12]	9.4
Frequency (MHz)	[Pair 12]	500.0
Limit (dB)	[Pair 12]	49.3



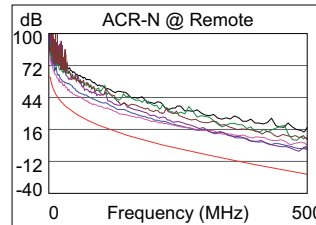
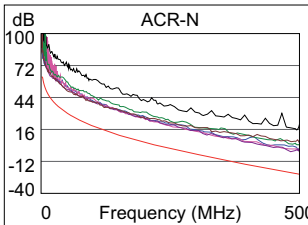
	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
<b>PASS</b>				
Worst Pair	36-45	36-45	36-45	36-45
<b>NEXT (dB)</b>	8.4	9.0	8.4	9.0
Freq. (MHz)	484.0	479.0	484.0	479.0
Limit (dB)	26.5	26.6	26.5	26.6
Worst Pair	45	36	45	36
<b>PS NEXT (dB)</b>	9.2	9.7	9.2	9.7
Freq. (MHz)	484.0	481.0	484.0	481.0
Limit (dB)	23.6	23.7	23.6	23.7



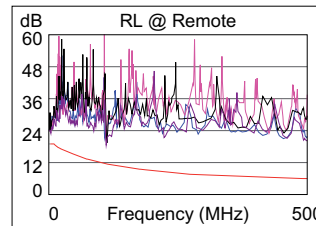
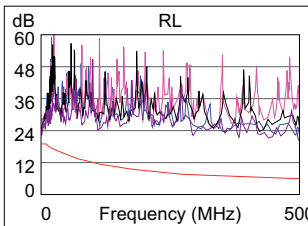
	MAIN	SR	MAIN	SR
<b>PASS</b>				
Worst Pair	45-12	45-12	45-12	45-12
<b>ACR-F (dB)</b>	14.7	14.7	14.7	14.7
Freq. (MHz)	472.0	474.0	472.0	474.0
Limit (dB)	9.8	9.7	9.8	9.7
Worst Pair	45	45	12	12
<b>PS ACR-F (dB)</b>	15.4	15.4	16.3	16.4
Freq. (MHz)	4.1	4.3	472.0	474.0
Limit (dB)	47.9	47.7	6.8	6.7



	MAIN	SR	MAIN	SR
<b>N/A</b>				
Worst Pair	36-45	12-45	36-45	36-45
<b>ACR-N (dB)</b>	18.1	15.3	18.1	18.4
Freq. (MHz)	484.0	41.8	484.0	479.0
Limit (dB)	-22.0	33.0	-22.0	-21.6
Worst Pair	45	12	45	36
<b>PS ACR-N (dB)</b>	18.0	16.8	18.8	19.2
Freq. (MHz)	13.4	4.9	484.0	481.0
Limit (dB)	44.4	54.6	-24.8	-24.6



	MAIN	SR	MAIN	SR
<b>PASS</b>				
Worst Pair	78	78	78	78
<b>RL (dB)</b>	4.9	3.7	14.2	7.0
Freq. (MHz)	3.0	3.9	500.0	111.0
Limit (dB)	19.0	19.0	6.0	11.5



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

LinkWare Version 6.0

Project: CAT6  
 Site: ZL



UNTITLED.flw

**B How to Order:**

**LP-CA7I0VLC01 LanPro Performax ®, 48V, communication U/FTP Cable, Solid 100% copper, LSZH IEC 60332-3C compliant, violet color jacket, ANSI/TIA/EIA-568-C.2 verified. 1000 ft Wood Spool.**

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