

CAT 5e Outdoor Network Cables by LanPro.

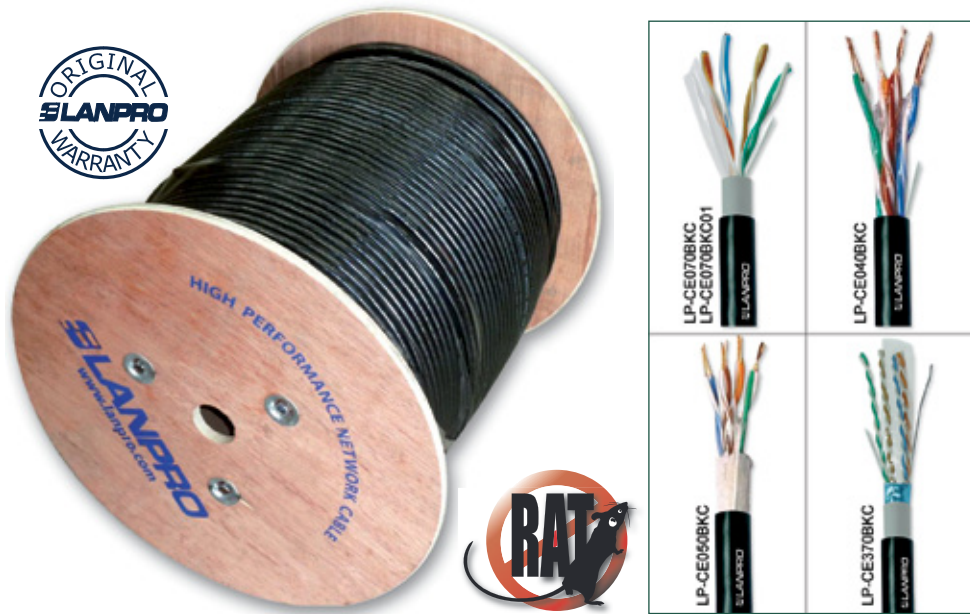
LPOUTDOORCAT5E_PFD_ENB01W

Features:

- Exceeds all standards for CAT 5e communication cable and is able to pass a CAT 6 certification test even though it is a CAT 5e cable.
- Extremely durable.
- Resistant to UV Rays.
- Abrasion resistant.
- Unshielded / Shielded
- Black PE Jacket.
- Direct burial.
- Capable of 100 MHz transmission giving you additional performance.
- Rattenweg™ (PE Rodent Resistance option).
- Fire retardant CMX or optionally CM, CMR, CMP and LSZH internal jacket which enables this part of the cable to run into premises after the PE jacket is removed at the entrance to the building.
- Operating Voltage ≤48 Volt rms

Applications:

- Outdoor cable runs to wireless Access Points (AP), Bridges or CPE.
- Outdoor cable runs to IP Video Surveillance Cameras.
- Inter-building networks.
- Ethernet, Phone, Paging, Alarm, Video and Power-over-Ethernet (PoE) Networks.
- The perfect CAT 5e cable for outdoor residential and commercial installations.
- Situations where reliability is of paramount importance, as in military complexes, hospitals, extreme weather locations, airports.



CAT 5e Outdoor Network cables by LanPro.

LanPro manufactures high grade outdoor CAT 5e cables. The outer jacket is constructed with black high-density polyethylene (PE), which is extremely durable and offers a very long product life (20 year life) with resistance against water permeation, moisture, UV, grease, oils, extreme temperatures. This external jacket offers a positive protection against corrosion, erosion, friction and there is an optional rodent attack protection PE type that pests like rats will not like to bite.

LanPro manufactures several models of Outdoor CAT 5e Network Cables: U/UTP Single PE Jacket Gel-filled, U/UTP Single PE Jacket with Water block tape, and the double Jacketed PE+CMX models is F/UTP. Other special outdoor cables can be produced under request as well as in special lengths, colors and terminations.

The internal jacket is CMX gray color as standard, and can be supplied in different colors and fire ratings (CM, CMR, CMP, and LSZH) as a special order.

The use of traditional indoor grade Category 5E cable in outdoor applications subjects it to rapid deterioration. Installation of indoor CAT 5e cable inside a conduit does not make it outdoor suitable either. Conduits filled with water will deteriorate the cable rapidly.

Therefore, choosing a high quality outdoor (UV-rated) CAT 5e cable with PE jacket and HDPE conductor insulation is extremely important. Lanpro outdoor cables will avoid costly network outages, keeping network reliability high and maintenance costs low. Some of our CAT 5e cables, like the LP-CE070BKC with Double Jacket, are direct burial. However, the use of a conduit is recommended.

If the cable is not well made or UV-rated, it may snag when coming out of the box, causing an installation breakdown or failure in sunlight over time. Wi-Fi towers and their installations MUST use this kind of product to avoid fast deterioration of the cabling set-up due to weather, dust, sun and rude environment.

If further protection performance and confidence are needed, you may opt for the CAT 6 shielded version also available from us.

We, at LanPro, have taken every aspect of an installation into account along with maintaining a decent cost solution while designing this product.

A Specifications

Electrical Specifications	
Velocity of Propagation	0.65 C
Capacitance @ 1 KHz	15 pF/ft
Operating Voltage	≤ 48 Volt rms
Standard	TIA/EIA 568A
Safety test voltage	1 KV/1 minute (DC)
Mechanical and Environmental Specifications.	
Cable Weight	34 kg/km (One Jacket type)
Operating Temperature Range	-40°C to +60°C
Cable Construction	
Conductor pairs	Solid Bare Copper (BC) 24AWG 0.02 in (0.51 mm).
Insulation pairs	High Density Polyethylene (HDPE) 0.04 in (0.93 mm).
Pairs Color	Blue/White with blue stripe, Orange/White with orange stripe, Green/White with green stripe, Brown/White with brown stripe.
Inner Jacket	UL-Approved CMX inner jacket (with or without gel) 0.21 in (5.20 mm) jacket thickness typical 0.024 in (0.60 mm) CMX, CM, CMR, CMP or LSZH.
Ripcord	Optional
Drain Wire	Only on shielded cables, e.g: F/UTP version
Sheath	Black PE Polyethylene or Rattenweg™ (PE Rodent Resistance option).

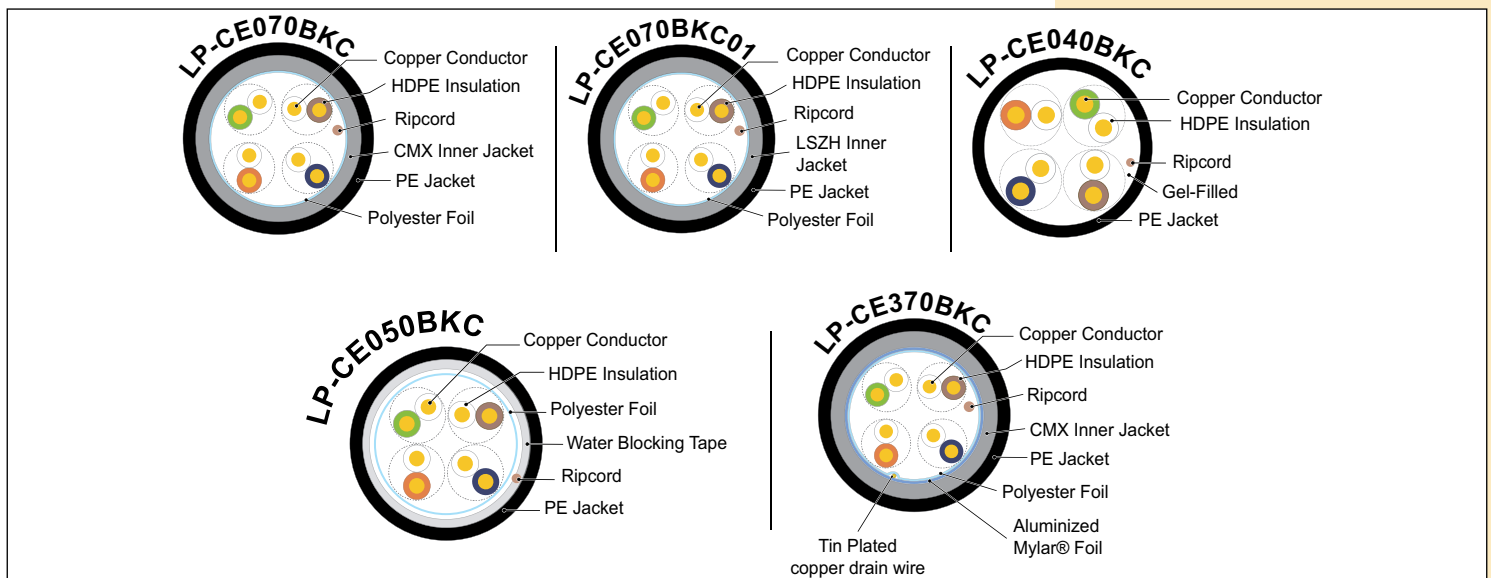
B Cat5e Outdoor Cable Construction.

P/N	Type	Category	Wire size (Awg#)	No of Pairs	Nominal Cable O.D. (mm)	Type of Jacket	Remarks	Description
LP-CE070BKC01	U/UTP	CAT 5e	24	4	5.1/5.4	PE, LSZH	100 MHz	Network Cable, all Weather Outdoor CAT 5e type U/UTP, solid, 100% copper, AWG 24, with Double Jacket, Black PE + Gray LSZH rated, in 1000 ft wood spool.
LP-CE040BKC	U/UTP	CAT 5e	24	4	6.0	PE	Gel Filled 100 MHz	Network Cable, all Weather Outdoor CAT 5e type U/UTP, solid, 100% copper, AWG 24, with Single Black PE Jacket, Gel Water Blocking Flooded core in 1000ft wood spool.
LP-CE050BKC	U/UTP	CAT 5e	24	4	6.5	PE	Water Blocked Tape 100 MHz	Network Cable, all Weather Outdoor CAT 5e type U/UTP, solid, 100% copper, AWG 24, with Single Black PE Jacket and Water Blocking Tape, in 1000 ft wood spool.
LP-CE070BKC	U/UTP	CAT 5e	24	4	6.3	PE+(CMX)	100 MHz	Network Cable, all Weather Outdoor CAT 5e type U/UTP (UTP), solid, 100% copper, AWG 24, with Double Jacket Black PE + Gray (CMX), in 1000 ft wood spool.
LP-CE370BKC	F/UTP	CAT 5e	24	4	8 mm	PE+(CMX)	100 MHz	LanPro Reliable® CAT 5E F/UTP Outdoor Network Cable, solid AWG 24 100% copper, Aluminum over Mylar® Foil shield with drain wire, Double Jacket (Black PE plus Gray CMX) and ripcord in a 1000 ft (305m)wood spool.

C EIA/TIA-568A and EIA/TIA-568b.2 Transmission Requirements.

Frequency	Attenuation (Horizontal Cable)	NEXT pair-pair	NEXT Power sum	ELFEXT pair-pair	ELFEXT Power sum	Structural Return Loss	Return Loss
MHz	dB/100 m	dB	dB	dB	dB	dB	dB
1	2.0	65.3	62.3	63.8	60.8	23.0	20.0
10	6.5	50.3	47.3	43.8	40.8	23.0	25.0
16	8.2	47.3	44.4	39.7	36.7	23.0	25.0
20	9.3	45.8	42.8	37.7	34.7	23.0	25.0
25	10.4	44.4	41.3	35.8	32.8	22.0	24.3
31.25	11.7	42.9	39.9	33.9	30.9	21.1	23.6
62.5	17.0	38.4	35.4	27.8	24.8	18.1	21.5
100	22.0	35.3	32.3	23.8	20.8	16.6	20.1

D Cable Cross Section



E How to order

- LP-CE070BKC01** Network Cable, all Weather Outdoor CAT 5e type U/UTP, solid, 100% copper, AWG 24, with Double Jacket, Black PE + Gray LSZH rated, in 1000 ft wood spool.
- LP-CE040BKC** Network Cable, all Weather Outdoor CAT 5e type U/UTP, solid, 100% copper, AWG 24, with Single Black PE Jacket, Gel Water Blocking Flooded core in 1000ft wood spool.
- LP-CE050BKC** Network Cable, all Weather Outdoor CAT 5e type U/UTP, solid, 100% copper, AWG 24, with Single Black PE Jacket and Water Blocking Tape, in 1000 ft wood spool.
- LP-CE070BKC** Network Cable, all Weather Outdoor CAT 5e type U/UTP (UTP), solid, 100% copper, AWG 24, with Double Jacket Black PE + Gray (CMX), in 1000 ft wood spool.
- LP-CE370BKC** LanPro Reliable® CAT 5E F/UTP Outdoor Network Cable, solid AWG 24 100% copper, Aluminum over Mylar® Foil shield with drain wire, Double Jacket (Black PE plus Gray CMX) and ripcord in a 1000 ft (305m)wood spool.
- LP-CE070BKS** Network Cable, all Weather Outdoor CAT 5e type U/UTP (UTP), solid, 100% copper, AWG 24, with Double Jacket Black PE + Gray (CMX), in 100 m Box.
- LP-CE000GRC2** LanPro Reliable® CAT 5e U/UTP Fig 8 Outdoor Network Cable with 1.2 mm Solid Messenger wire for 100m span, UV rated Gray CMX Jacket with AWG 24 solid copper conductors, 1000 ft Wood Spool.
- LP-CE0N0BKC2** LanPro Reliable® CAT 5e U/UTP Fig 8 Outdoor Network Cable with 1.2 mm Solid Messenger wire for 100m span, Black PE Jacket with AWG 24 Solid Copper conductors, 1000 ft Wood Spool.
- LP-CECN0BKC** LanPro Reliable® CAT 5e SF/UTP Outdoor Network Cable, with 4 pairs of AWG 24 solid 100% copper conductors with an overall layer of Aluminum Foil shield and with an Aluminum-Magnesium braid of 60% coverage wound on top of it. It also includes a drain wire and a Single Black PE Jacket with ripcord in a 1000 ft (305m) wood spool.

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