

PRO-7FCAT5E-BE  
RJ-45 (Male) to RJ-45 (Male) STRAIGHT CAT5E UTP PVC  
BLUE COPPER PATCH CABLE, 7FT



### **PRO-7FCAT5E-BE**

7ft RJ-45 (Male) to RJ-45 (Male) Straight Blue Cat5e UTP PVC Copper Patch Cable

#### **Features**

- Rated temperature: 75°C
- Reference Standard: UL 444, ANSI/TIA-568.2-D  
IEC 61156-5 & ISO/IEC 11801
- Flame Test: CMP
- Solid bare copper conductor
- Color-coded FEP insulation
- LS-PVC jacket
- Color: Blue



#### **Applications**

- 100Base-T4
- 100Base-TX
- 100VG-AnyLAN
- 1000Base-T
- 1000Base-TX
- 155Mbps ATM
- 622Mbps ATM

#### **Product Description**

This is a 2.13m (7.0ft) RJ-45 (male) to RJ-45 (male) green Cat5e UTP PVC-rated patch straight cable that is used for high speed data transfer. Our patch cables are 100% compliant for all of your networking needs and are guaranteed by federal law to not affect or void OEM warranties.

## Physical Characteristics

Parameter	Specification
<b>Structure</b>	
Number of Conductor Pairs	4
Construction	F/UTP
<b>Conductor</b>	
AWG	24 AWG
Conductor material	Solid bare copper
Conductor dimension	0.525 ±0.02 mm
<b>Insulation</b>	
Insulation material	FEP
Insulation dimension	1.01 ±0.05 mm
Number color PURE COLOR	1.White & Blue
	2.White & Orange
	3.White & Green
	4.White & Brown
<b>Cabling</b>	
Twisting lay length	≤30 mm
Cabling lay length	≤200 mm
Filler material	N/A
Binder material	PTFE Tape
<b>Shield</b>	
Individual shield & material	N/A
Primary overall shield & material	AL/Polyester
Secondary overall shield & material	N/A
Shield coverage	100%
Drain wire Nom	26AWG tinned copper
<b>Outer Jacket</b>	
Outer jacket material	LS-PVC
Outer jacket thickness (Nom.)	0.4mm
Overall nominal dimension	5.85±0.30 mm
Outer jacket rip cord	N/A
Outer jacket color	Per customer request

## Mechanical Characteristics

Parameter	Performance
Operating temperature range	-20 °C ~ +75 °C
Bulk cable weight approx	45 kg/km
Max. recommended ruling tension	110 N
Min. bend radius (Install)	10 x O.D.
Outer jacket tensile strength	$\geq 13.8$ MPa
Outer jacket elongation	$\geq 100\%$
Outer jacket aging condition	100 °C x 240 hrs
After aging, Tensile strength	$\geq 85\%$ of Unaging
After aging, elongation	$\geq 50\%$ of Unaging
Cold bend	No crack (@ -20°C x 4hrs)

## Electrical Characteristics

Parameter	Performance
Nom. mutual capacitance	$\leq 5.6$ nF/100m (@1kHz)
Pair to ground capacitance unbalance	$\leq 330$ pF/100m
Nominal velocity of propagation	65%
Max. delay skew	45 ns/100m (@100MHz)
Max. conductor resistance	93.8 $\Omega$ /km (@ 20 °C)
Max. conductor resistance unbalance	5% (@ 20 °C)
Min. insulation resistance	5000 M $\Omega$ ·m
Max. operating voltage	300 V

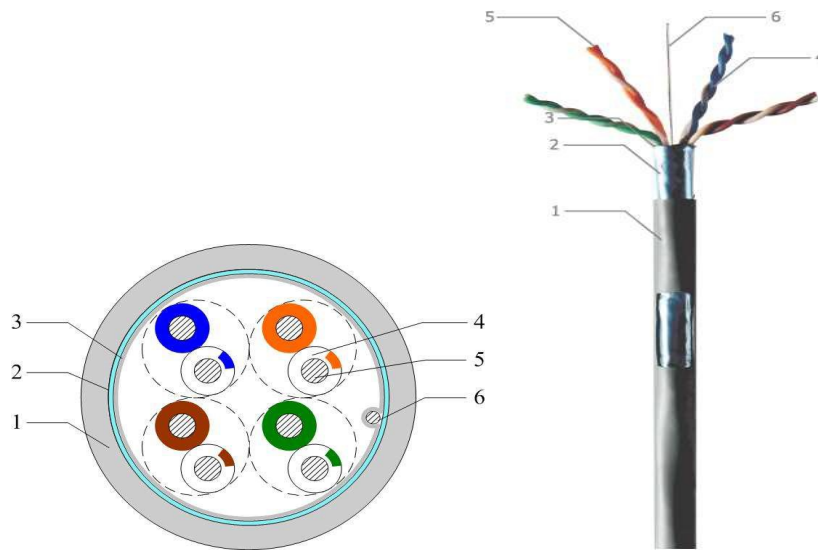
## Electrical Performance

Frequency	Characteristic Impedance Upper limit	Characteristic Impedance Lower limit	ATT	RL	NEXT	PS NEXT	ELFEXT	PS ELFEXT	PD
(MHz)	Z <sub>u</sub> (Ω)	Z <sub>l</sub> (Ω)	(dB/100m)	(dB Min)	(dB Min)	(dB Min)	(dB Min)	(dB Min)	(ns/100m Max)
1	-	-	2.0	20.0	65.3	62.3	63.8	60.8	570.0
4	115.2	86.8	4.1	23.0	56.3	53.3	51.8	48.8	552.0
8	112.7	88.8	5.8	24.5	51.8	48.8	45.7	42.7	546.7
10	111.9	89.4	6.5	25.0	50.3	47.3	43.8	40.8	545.4
16	111.9	89.4	8.2	25.0	47.2	44.2	39.7	36.7	543.0
20	111.9	89.4	9.3	25.0	45.8	42.8	37.8	34.8	542.0
25	113.0	88.5	10.4	24.3	44.3	41.3	35.8	32.8	541.2
31.25	114.1	87.6	11.7	23.6	42.9	39.9	33.9	30.9	540.4
62.5	118.4	84.5	17.0	21.5	38.4	35.4	27.9	24.9	538.6
100	121.9	82.0	22.0	20.1	35.3	32.3	23.8	20.8	537.6
150	125.7	79.6	27.5	18.9	32.7	29.7	20.3	17.3	536.9
200	128.8	77.6	32.4	18.0	30.8	27.8	17.8	14.8	536.5

### Notes:

1. Cable that meet the requirements of the template are not required to be measured for return loss; alternately cables that meet the return loss requirements are not required to be measured for characteristic impedance.
2. Cable measurement precautions  
Mutual capacitance, capacitance unbalance, characteristic impedance, return loss, insertion loss, SRL, NEXT loss, ACRF, TCL, and TCTL measurements and calculations shall be performed on cable samples of 100 m (328 ft) removed from the reel or packaging. The test sample shall be laid out along a non-conducting surface, loosely coiled, or supported in aerial spans, and all pairs shall be terminated according to the specific requirements of this annex. Other test configurations are acceptable if correlation to the reference method has been verified. In case of conflict, the reference method (100 m, off-reel, resistor terminated) shall be used to determine conformance to the minimum requirements of this Standard.

## Mechanical Specifications



1	Outer jacket
2	AL/Polyester
3	PTFE tape
4	Insulation
5	Conductor
6	Drain wire

**About Us:**

Proline Options is one of North America's leading providers of transceivers and high speed cabling. With a reputation for quality, tested products that cover the connectivity spectrum, Proline Options has a solution for you regardless of the specification.

At Proline Options, every product is tested in its intended application - never batch or spec tested only. We run bandwidth, distance and IOS network tests. We have documented an impressive 0.03% failure rate over the last 10 years. To continue this rate of success we invest millions annually in our own on-site testing lab.

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