

## CAT5e Shielded Twisted-Pair (STP) Patch Cables

**Protect CAT5e lines  
from noise.**



## FEATURES

- » The cost-effective alternative to fiber optic cabling in high-noise environments.
- » Foil shielding protects signals from EMI/RFI.
- » Reliable performance in extreme climate conditions.
- » Snagless boots.
- » Choose from stranded or solid conductors.
- » PVC and plenum-safe jacketing available.

## OVERVIEW

If you have a high-noise environment and running fiber optic cable is not cost-effective, the **CAT5e Shielded Twisted-Pair (STP) Patch Cables** are your practical alternative for runs up to 150 feet and beyond.

What is noise? It is the common term for electromagnetic interference (EMI) or radio-frequency interference (RFI). It's generated by motors, fluorescent lights, air conditioners, and office appliances.

EMI and RFI play havoc with ordinary, unshielded copper cables. But the BLACK BOX® **CAT5e STP Patch Cables** are built for harsh environments. In fact, they perform reliably in temperatures as hot as 176°F (80°C) or as cold as -4°F (-20°C).

These cables are built with protective foil shielding and support 100-MHz or 155-Mbps high-speed communications.

The patch cables are terminated with the T568B wiring pattern and have slide-back, snagless, molded gray boots. They are ideal for applications with TIA/EIA 568-A Category 5e and ISO/IEC 11801 standards.

Choose from two versions, either with stranded conductors and a PVC jacket (EVNSL72GY) or with solid conductors and a jacket safe for plenum installation (EVNSL73GY).

The EVNSL72GY cables are available in lengths from 3 feet (0.9 m) to 20 feet (6 m), and custom lengths are also available. The EVNSL73GY cables are available in lengths from 25 feet (7.6 m) to 150 feet (45.7 m).

## Technically Speaking

### Shielded vs. unshielded cable.

The environment determines whether cable should be shielded or unshielded. Quiet office environments, busy retail establishments, and industrial workshops all require different levels of shielding.

Shielding is the sheath surrounding and protecting the wires of the cable from electromagnetic leakage and interference (EMI). This activity is commonly referred to as noise. Sources of EMI in the workplace include elevator motors, fluorescent lights, generators, air conditioners, and photocopiers.

To protect your data from high EMI, choose a shielded cable. Foil is the most basic cable shield, but a copper-braid shield provides more protection.

Use a foil-shielded cable in busy office or retail environments. For industrial environments, you might want to choose a copper-braid shield. For quiet office environments, choose unshielded cable.

### Stranded vs. solid conductor.

Stranded cable is for use in shorter runs between network interface cards (NICs) and wallplates, or between concentrators and patch panels, hubs, and other rackmounted equipment. Stranded-conductor cable is much more flexible than solid-core cable. However, attenuation is higher in stranded-conductor cable, so the total length of stranded cable in your system should be kept to a minimum to reduce signal degradation.

Solid cable is for use in runs between two wiring closets or from the wiring closet to a wallplate. Solid-conductor cable shouldn't be bent, flexed, or twisted repeatedly. It's designed for both backbone and horizontal cable runs. Its attenuation is lower than that of stranded-conductor cable.

For more information on how to choose the right cable for your application, call our FREE Tech Support at 724-746-5500, 24 hours a day!

## TECH SPECS

### Conductor Gauge —

EVNSL72GY: 26 AWG, 7/34 stranded tinned copper;  
EVNSL73GY: 24 AWG, 7/32 solid tinned copper

**Construction** — EVNSL72GY: Gray PVC jacket, ripcord, foam polypropylene insulation, aluminum/polyester shield with drain wire;  
EVNSL73GY: Gray plenum polymer alloy jacket, ripcord, FEP insulation, aluminum/polyester shield with drain wire

**Delay Skew (Maximum)** — <25 nsec/ 100 m

**ELFEXT (Minimum/100 m)** — EVNSL72GY: 66 dB @ 100 MHz;

EVNSL73GY: 63 dB @ 100 MHz

**Frequency** — Up to 100 MHz

**Impedance** — 100 ± 15 ohms

**NEXT (Minimum/100 m)** — EVNSL72GY: 64 dB @ 100 MHz;

EVNSL73GY: 67 dB @ 100 MHz

**PS-ELFEXT (Minimum/100 m)** — 63 dB @ 100 MHz

**PS-NEXT (Minimum/100 m)** — 64 dB @ 100 MHz

**Return Loss (Minimum)** — 18.9 dB @ 100 MHz

**Velocity of Propagation (Nominal)** — EVNSL72GY: 71%;

EVNSL73GY: 72%

**Wiring Type** — TIA/EIA-T568B

**Connectors** — RJ-45



EVNSL73GY

### Item

### Code

CAT5e Shielded Twisted-Pair (STP) Patch Cables with Snagless Boots, T568B, 4-Pair, RJ-45

PVC, Stranded

Gray

3-ft. (0.9-m)

6-ft. (1.8-m)

10-ft. (3-m)

20-ft. (6-m)

Custom Lengths

Blue

3-ft. (0.9-m)

6-ft. (1.8-m)

10-ft. (3-m)

20-ft. (6-m)

Custom Lengths

Plenum, Solid

Gray

10-ft. (3-m)

25-ft. (7.6-m)

50-ft. (15.2-m)

100-ft. (30.4-m)

150-ft. (45.7-m)

Blue

10-ft. (3-m)

25-ft. (7.6-m)

50-ft. (15.2-m)

100-ft. (30.4-m)

150-ft. (45.7-m)

**EVNSL172GY-0003**

**EVNSL172GY-0006**

**EVNSL172GY-0010**

**EVNSL172GY-0020**

**EVNSL72GY**

**EVNSL172BL-0003**

**EVNSL172BL-0006**

**EVNSL172BL-0010**

**EVNSL172BL-0020**

**EVNSL72GY**

**EVNSL73GY-0010**

**EVNSL73GY-0025**

**EVNSL73GY-0050**

**EVNSL73GY-0100**

**EVNSL73GY-0150**

**EVNSL173BL-0010**

**EVNSL173BL-0025**

**EVNSL173BL-0050**

**EVNSL173BL-0100**

**EVNSL173BL-0150**

## Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

### Recognize any of these situations?

- You wait more than 30 minutes to get through to a vendor's tech support.
- The so-called "tech" can't help you or gives you the wrong answer.
- You don't have a purchase order number and the tech refuses to help you.
- It's 9 p.m. and you need help, but your vendor's tech support line is closed.

According to a survey by *Data Communications* magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application.

Don't waste time and money—call Black Box today.