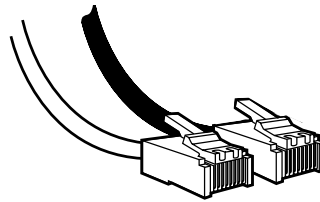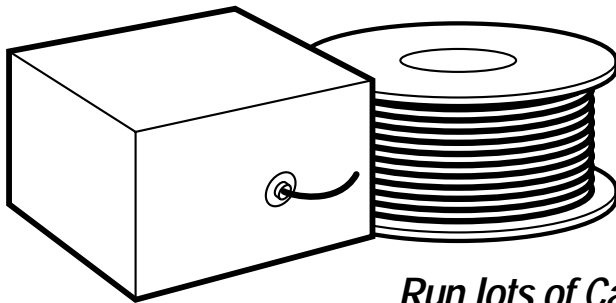# BLACK BOX
NETWORK SERVICES

COLORED CATEGORY 5e BULK CABLE, SOLID-CONDUCTOR PATCH CABLE, & CATEGORY 5e BACKBONE CABLE

Run lots of Category 5 cable to support different high-speed applications—and know at a glance which cable is for which purpose.

Key Features

▶ *Choose Category 5 cable that meets the proposed "enhanced" standard.*

▶ *Different colors make it easy to distinguish between different applications and installations.*

▶ *Both bulk and patch cable are 24 AWG and verified to EIA/TIA-568 specifications.*

▶ *Shielded & screened twisted pair (STP, ScTP) are great for noisy environments.*

▶ *Bulk cable guaranteed for life!*

You're getting ready for data rates of 100 Mbps and up. You'll have to install and maybe build what seems like miles of Category 5 cable for each of several systems. And you know what's coming—printing and attaching labels to every single cable so that people can figure out which cables are carrying what.

Why not reduce the uncertainty (and cut down on the labeling) by using different colors? Unlike labels, the colors provide visual cues for a cable's function all along its length, and they make cables stand out from others in the same nest or bundle.

We offer 4-pair PVC Category 5 solid or stranded cable in red, blue, yellow, and green in addition to the usual beige. And the Category 5e Bulk Cable meets minimum standards for proposed CAT5e (CAT5 plus delay skew, ELFEXT, PS-NEXT, and PS-ELFEXT). It features low attenuation and near-end crosstalk (NEXT) for your 100-MHz applications.

You can order the solid cables in reels or in handy dispenser boxes. We also offer the plain beige CAT5 bulk cable in custom lengths and in other types such as 2-pair, shielded, screened, and plenum-rated.

The wire in all of these cables is 24 AWG (except for the 26-AWG shielded variety EVMSL06), so the cables are rugged and reliable. They've all been verified for compliance with EIA/TIA-568 specifications for site wiring in Category 5 applications. What's more, the bulk cable is guaranteed for life—if you ever find a defect in it, we'll fix or replace it for free.

Use the solid patch cables for your longer or higher-speed runs. Because they have lower attenuation than stranded cables, they can safely carry data farther and faster.

And for superior cable in your backbone runs, use our 4-pair, 24-AWG solid-conductor Category 5e backbone cable, which meets the standards proposed for CAT5e. It offers even better performance than Category 5 cable, and its 350-MHz frequency is more than triple the verified range of the EIA/TIA 568A Category 5 standard.

Typical application:

You're currently expanding your 10BASE-T and Token Ring networks, but you know Frame Relay or ATM will be coming soon. Dedicating spools of CAT5e cable to color-specific assignments will simplify your job, both now and in the future.

Additional equipment you might need:

- High-Performance Category 5 Modular Plugs (our product codes for 25-piece bags: FM730 for stranded/unshielded, FM731 for stranded/shielded, FM732 for solid/unshielded, FM733 for solid/shielded or solid/screened).

- A Modular Crimp Tool (our product codes: FTM40 for the tool frame, FTM50 for the Category-5-plug die set).

- Cable Management Guides to group and control your cable runs (our product codes JPM142A through JPM145A).

- If you need to run cables across an open floor, color-coded FloorTrak™ cable covers (our product codes FK210 through FK214).

- If you're pulling plenum-rated cables through conduits, our 6-Grip Pulling Kit.

- The SCAN-LAN V Two-Way test kit for testing and certifying cables for full Category 5 100-MHz readiness (our product code TS690AE).

- To secure your grouped cable runs, matching color-coded Velcro® Plus Cable Wraps (screw-mountable—our product codes FT420 through FT427) or Reusable Cable Wraps (non-mountable—our product codes: FT260 through FT267 for 6" [15.2 cm] versions or FT120 through FT127 for 12" [30.5 cm] versions).

Specifications

Bulk Cable

Resistance — EYN7xxA:
25 mΩ/ft. (82 mΩ/m);
EVNSL7xA: 28.6 mΩ/ft.
(93.8 mΩ/m);
EVNSL0xA, EVMSL06A:
26mΩ/ft. (85 mΩ/m);
EYN83xA: 25mΩ/ft.
(82 mΩ/m)

Mutual Capacitance —
EVNSL7xA: 15 pF/ft.
(49.2 pF/m) norm.,
17 pF/ft. (55.8 pF/m) max.
at 1 KHz and 20˚ C;
EYN83xA, EVNSL71xA:
17 pF/ft. (5.6 pF/100 m)
max. at 1 KHz and 20˚C;
All others: 15 pF/ft.
(49.2 pF/m) max. at 1 MHz

Impedance — 100 ± 15 ohms from 1 to 100 MHz

Attenuation (worst pair, per 328.1 ft. [100 m]) —
EYN7xxA, EVNSL7xA:
From 2 dB at 1 MHz to
6.5 dB at 10 MHz to 22 dB
at 100 MHz;
EVNSL0xA: From 2.3 dB at

1 MHz to 9.8 dB at 10 MHz
to 26.9 dB at 100 MHz;
EVMSL06A: From 2.8 dB at
1 MHz to 9.2 dB at 10 MHz
to 27.9 dB at 100 MHz;
EYN83xA: From 2.4 dB at
1 MHz to 7.8 dB at 10 MHz
to 26.4 dB at 100 MHz;
EVNSL71xA: From 2.1 dB at
1 MHz to 6.6 dB at 10 MHz
to 22 dB at 100 MHz

Near-End Crosstalk (min., worst pair, per minute) — EYN7xxA,
EVNSLxxA, EYN83xA:
From 62 dB at 1 MHz to 47 dB
at 10 MHz to 32 dB at 100 MHz;
EVMSL06A: From 64 dB at
1 MHz to 49 dB at 10 MHz
to 34 dB at 100 MHz

Conductor Material — EYN7xxA,
EVNSL7xA, EYN83xA,

Solid copper;
EVNSL0xA, EVMSL06A:
Stranded copper

Number of Conductors —
EYN71xA: Four (two pairs);
All others: Eight (four pairs)

Wire Gauge —
EVMSL06A: 26 AWG;
All others: 24 AWG

Shielding — EVNSL7xA:
Aluminum/polyester tape,
25% overlap, aluminum
side in, plus drain wire;
EVMSL06: Foil with
drain wire;
All others: None

Jacket — EYN718A, EYN738A,
EVNSL71A: Plenum-rated
FEP Teflon® (CMP/MPP);
All others: PVC (CMR/MPR)

Diameter —
EVMSL06A: 0.210" (5.3 mm);
EVNSL70A: 0.250" (6.4 mm);
EVNSL71A: 0.220" (5.6 mm);
EYN83xA: 0.185" (4.7 mm);
EVNSL71xA (Siamese):
0.170"H x 0.360"W
(4.3 x 9.1 mm);
All others: 0.214" (5.4 mm)

Solid Patch Cables

Compliance —
All cables: EIA/TIA-568B
Category 5 (UL verified);
EYN737, EYN790: UL,
CUL, NEC type CMR;
EYN738, EYN791: UL,
CUL, NEC type CMP

Resistance —
EYN737, EYN790:
25 mΩ/ft. (82 mΩ/m)
EYN738, EYN791:
28.6 mΩ/ft. (93.8 mΩ/m)

Mutual Capacitance — EYN737,
EYN790: 15 pF/ft.
(49.2 pF/m) max. at
1 MHz;
EYN738, EYN791: 14 pF/ft.
(45.9 pF/m) max. at
1 MHz

Impedance — 100 ± 15 ohms from 1 to 100 MHz

Attenuation (worst pair, per 328 ft. [100 m]) — From 2 dB at 1 MHz
to 6.5 dB at 10 MHz to 22 dB at
100 MHz

Near-End Crosstalk (min, worst pair, per minute) —
62 dB at 1 MHz to 47 dB at
10 MHz to 32 dB at 100 MHz

Conductor Material — Solid copper

Number of Conductors — Eight (four pairs)

Pinning — "-MS" cables: Straight
through (1 to 1, 2 to 2, etc.);
"-M" cables: Crossed (1 to 3,
2 to 6, 4 to 5, 7 to 8)

Wire Gauge — 24 AWG

Shielding — None

Connectors — (2) RJ-45 M (plastic)

Jacket — EYN737, EYN790:
PVC (CMR/MPR); EYN738,
EYN791: Plenum-
rated FEP Teflon®
(CMP/MPP)

Tensile Strength — EYN737,
EYN790: 13 lb. (5.9 kg)
maximum pulling tension;
EYN738, EYN791: 25 lb.
(10.1 kg) maximum
pulling tension

Bend Radius — 0.8" (2.3 cm)

Diameter — 0.214" (5.4 mm)

Category 5e Backbone Cable

Conductor Gauge —
24 AWG

Cable Construction — EYN795: PVC;
EYN750: FEP Teflon

Cable Type — 4-pair solid copper
UTP

Frequency — Up to 350 MHz

Impedance — 100 ± 22% at 350 MHz

Nominal Capacitance — 14 pF/ft.

NEXT — 24 dB min. at 350 MHz

Standards —
EIA/TIA Category 5

Ordering Information

Bulk Solid Category 5e Cable, Beige Except Where Noted

Item	Type	Length	Color	Package	Code
2-Pair UTP	PVC	500-ft. (152.4-m) reel			EYN717A-0500
		1000-ft. (304.8-m) reel			EYN717A-1000
		Custom lengths			EYN717A
4-Pair UTP	PVC	500-ft. (152.4-m)		Reel	EYN737A-0500
		1000-ft. (304.8-m)		Reel	EYN737A-1000
			Blue	Reel	EYN739A-R
			Blue	Box	EYN739A-B
			Green	Reel	EYN740A-R
			Green	Box	EYN740A-B
			Red	Reel	EYN741A-R
			Red	Box	EYN741A-B
			Yellow	Reel	EYN742A-R
			Yellow	Box	EYN742A-B
				Box	EYN737A-B
		Custom lengths		Reel(s)	EYN737A
	Plenum-rated	500-ft. (152.4-m)		Reel	EYN738A-0500
		1000-ft. (304.8-m)		Reel	EYN738A-1000
		Custom lengths		Reel(s)	EYN738A
		500-ft. (152.4-m)	Blue	Reel	EYN743A-0500
		1000-ft. (304.8-m)	Blue	Reel	EYN743A-1000
		500-ft. (152.4-m)	Yellow	Reel	EYN744A-0500
		1000-ft. (304.8-m)	Yellow	Reel	EYN744A-1000
4-Pair ScTP	PVC	1000-ft. (304.8-m) box			EVNSL70A-1000
	Plenum-rated	1000-ft. (304.8-m) box			EVNSL71A-1000

Bulk Stranded Category 5 Cable, Beige Except Where Noted

Item	Type	Length	Color	Code
2-Pair UTP	PVC	250-ft. (76.2-m) reel		EYN832A-0250
		Custom lengths		EYN832A
		250-ft. (76.2-m) reel	Blue	EYN833A-0250
		Custom lengths	Blue	EYN833A
		250-ft. (76.2-m) reel	Green	EYN834A-0250
		Custom lengths	Green	EYN834A
		250-ft. (76.2-m) reel	Red	EYN835A-0250
		Custom lengths	Red	EYN835A
		250-ft. (76.2-m) reel	Yellow	EYN836A-0250
		Custom lengths	Yellow	EYN836A
		250-ft. (76.2-m) reel	Black	EYN837A-0250
		Custom lengths	Black	EYN837A

Ordering Information

ITEM					CODE
4-Pair UTP PVC			250-ft. (76.2-m) reel		EVNSL05A-0250
			500-ft. (152.4-m) reel		EVNSL05A-0500
		Blue	250-ft. (76.2-m) reel		EVNSL01A-0250
		Blue	500-ft. (152.4-m) reel		EVNSL01A-0500
		Green	250-ft. (76.2-m) reel		EVNSL02A-0250
		Green	500-ft. (152.4-m) reel		EVNSL02A-0500
		Red	250-ft. (76.2-m) reel		EVNSL01A-0250
		Red	500-ft. (152.4-m) reel		EVNSL01A-0500
		Yellow	250-ft. (76.2-m) reel		EVNSL01A-0250
		Yellow	500-ft. (152.4-m) reel		EVNSL01A-0500
		Black	250-ft. (76.2-m) reel		EVNSL07A-0250
		Black	500-ft. (152.4-m) reel		EVNSL07A-0500
	Plenum-rated		1000-ft. (304-m) reel		EYN860A-1000
			1000-ft. (304-m) box		EYN860A-B
		Blue	1000-ft. (304-m) reel		EYN862A-1000
		Blue	1000-ft. (304-m) box		EYN862A-B
STP	PVC		500-ft. (152.4-m) reel		EVMSL06A-0500
Solid Category 5 4-Pair UTP Patch Cable					
Beige	PVC	Straight-through-pinned		Stock lengths, reel	EYN737MS-0xxx*
				Custom lengths, reel(s)	EYN737MS
		Cross-pinned		Stock lengths, reel	EYN737M-0xxx*
				Custom lengths, reel(s)	EYN737M
Blue	PVC	Straight-through-pinned		Stock lengths, reel	EYN790MS-0xxx*
				Custom lengths, reel(s)	EYN790MS

*The "xxx" at the end of the product codes for the stock-length cables represents cable length in feet. For PVC cables, "xxx" can be "002" for 2 feet (61 cm), "005" for 5 feet (1.5 m), "010" for 10 feet (3 m), "015" for 15 feet (4.6 m) "020" for 20 feet (6.1 m), "025" for 25 feet (7.6 m), "050" for 50 feet (15.2 m), or "100" for 100 feet (30.5 m). For plenum-rated cables, "xxx" can be "025" for 25 feet (7.6 m), "050" for 50 feet (15.2 m), or "100" for 100 feet (30.5 m).

Ordering Information

ITEM	CODE	CODE
Category 5e Backbone Cable, 4-Pair, Solid Conductor, 24 AWG, Beige (Custom Colors Available. *Call us!*)		
	<u>Straight-Pinned</u>	<u>Cross-Pinned</u>
PVC, NEC® CM		
2-ft. (0.6-m)	EYN795MS-0002	EYN795M-0002
5-ft. (1.5-m)	EYN795MS-0005	EYN795M-0005
10-ft. (3.0-m)	EYN795MS-0010	EYN795M-0010
15-ft. (4.6-m)	EYN795MS-0015	EYN795M-0015
20-ft. (6.1-m)	EYN795MS-0020	EYN795M-0020
25-ft. (7.6-m)	EYN795MS-0025	EYN795M-0025
50-ft. (15.2-m)	EYN795MS-0050	EYN795M-0050
100-ft. (30.4-m)	EYN795MS-0100	EYN795M-0100
Custom Lengths	EYN795MS	EYN795M
Plenum, NEC CMP		
25-ft. (7.6-m)	EYN750MS-0025	EYN750M-0025
50-ft. (15.2-m)	EYN750MS-0050	EYN750M-0050
100-ft. (30.4-m)	EYN750MS-0100	EYN750M-0100
Custom Lengths	EYN750MS	EYN750M
Bulk Category 5 Siamese Cable, 4-Pair, Beige		
PVC 500-ft. (152-m) reel		EVNSL717A-500
Custom Length		EVNSL717A
Plenum 500-ft. (152-m) reel		EVNSL718A-500
Custom Length		EVNSL718A