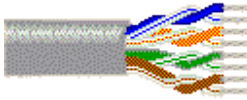


## 1752A Multi-Conductor - Enhanced Category 5e Bonded-Pair Cables



### Description:

24 AWG bonded-pairs stranded (7x32) TC conductors, non-plenum, Polyolefin® insulation, RJ-45 compatible, see color code chart (below), PVC jacket (red, black, yellow, green, orange, blue, purple or gray).

### Usage (Overall)

**Suitable Applications:** Premise Patch Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, Noisy Environments

### Physical Characteristics (Overall)

#### Conductor

**AWG:**

# Pairs	AWG	Stranding	Conductor Material
4	24	7x32	TC - Tinned Copper

#### Insulation

**Insulation Material:**

Insulation Material
PO - Polyolefin

#### Outer Shield

**Outer Shield Material:**

Outer Shield Material
Unshielded

#### Outer Jacket

**Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

#### Overall Cabling

**Overall Nominal Diameter:** 0.220 in.

#### Pair

**Pair Color Code Chart:**

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

### Mechanical Characteristics (Overall)

**Operating Temperature Range:** -20°C To +80°C

**Bulk Cable Weight:** 25 lbs/1000 ft.

**Max. Recommended Pulling Tension:** 40 lbs.

**Min. Bend Radius (Install)/Minor Axis:** 0.250 in.

## 1752A Multi-Conductor - Enhanced Category 5e Bonded-Pair Cables

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM, UL444
CEC/C(UL) Specification:	CM
Other Standards:	11801 Category 5 Patch
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Telecommunications Standards:	568-B.2 Category 5e Patch
Other Specification:	NEMA WC-63.1 Category 5, ICEA 661, Cat 5x-100 Patch, UL verified to Category 5e

#### Flame Test

UL Flame Test:	UL1685 UL Loading
CSA Flame Test:	FT1

#### Plenum/Non-Plenum

Plenum (Y/N):	No
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### Electrical Characteristics (Overall)

#### Nom. Mutual Capacitance:

Capacitance (pF/ft)	15
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#### Nominal Velocity of Propagation:

VP (%)	70
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Maximum Capacitance Unbalance (pF/100 m): 66

#### Maximum Delay:

Delay (ns/100 m)	510
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#### Max. Delay Skew:

Delay Skew (ns/100 m)	25
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#### Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)	9
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#### Max. Operating Voltage - UL:

Voltage	300 V RMS
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#### Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)	3
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### Electrical Characteristics-Premise (Overall)

#### Premise Cable Electrical Table 1:

## 1752A Multi-Conductor - Enhanced Category 5e Bonded-Pair Cables

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. PSACR (dB)	Min RL (dB)
1	2.4	65.3	65.3	62.9	20.0
4	4.8	56.3	56.3	51.5	23.0
8	6.8	51.8	51.8	45.0	24.5
10	7.7	50.3	50.3	42.6	25.0
16	9.7	47.3	47.3	37.5	25.0
20	11.0	45.8	45.8	34.8	25.0
25	12.4	44.3	44.3	31.9	24.3
31.25	13.9	42.9	42.9	29.0	23.6
62.5	20.2	38.4	38.4	18.3	21.5
100	26.0	35.3	35.3	9.2	20.1
155	33.2	32.5	32.5	0	19.0
200	38.4	30.8	30.8		19.0
250	43.7	29.3	29.3		18.0
300	48.6	28.2	28.2		18.0
310	49.5	27.9	27.9		18.0
350	53.2	27.2	27.2		17.0

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 12	105 ± 10	63.8	60.8
4	100 ± 12	100 ± 10	51.7	48.7
8	100 ± 12	100 ± 10	45.7	42.7
10	100 ± 12	100 ± 10	43.8	40.8
16	100 ± 12	100 ± 10	39.7	36.7
20	100 ± 12	100 ± 10	37.7	34.7
25	100 ± 15	100 ± 10	35.8	32.8
31.25	100 ± 15	100 ± 10	33.9	30.9
62.5	100 ± 15	100 ± 10	27.8	24.9
100	100 ± 15	100 ± 10	23.8	20.8
155	100 ± 18	100 ± 10	19.9	16.9
200	100 ± 20	100 ± 10	17.7	14.7
250	100 ± 20	100 ± 10	15.8	12.8
300	100 ± 20	100 ± 10	14.2	11.2
310	100 ± 20	100 ± 10	13.9	10.9
350	100 ± 22	100 ± 10	12.9	9.9

### Notes (Overall)

**Notes:** Jacket sequentially marked at 2 ft. intervals. US Patent #'s 5, 606, 151; 5, 734, 126; 5, 763, 823. Third party verified to TIA/EIA-568-B.2, Category 5e Patch.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1752A F2VU1000	1,000 FT	24.000 LB	GRAY, DEC		4 PR #24 PP FRPVC
1752A F2V1000	1,000 FT	26.000 LB	GRAY, DEC	C	4 PR #24 PP FRPVC
1752A 002U1000	1,000 FT	24.000 LB	RED		4 PR #24 PP FRPVC
1752A 0021000	1,000 FT	26.000 LB	RED	C	4 PR #24 PP FRPVC
1752A 003U1000	1,000 FT	24.000 LB	ORANGE		4 PR #24 PP FRPVC
1752A 0031000	1,000 FT	26.000 LB	ORANGE	C	4 PR #24 PP FRPVC
1752A 004U1000	1,000 FT	24.000 LB	YELLOW		4 PR #24 PP FRPVC
1752A 0041000	1,000 FT	26.000 LB	YELLOW	C	4 PR #24 PP FRPVC
1752A 005U1000	1,000 FT	24.000 LB	GREEN, DARK		4 PR #24 PP FRPVC
1752A 0051000	1,000 FT	26.000 LB	GREEN, DARK	C	4 PR #24 PP FRPVC
1752A 006U1000	1,000 FT	24.000 LB	BLUE, LIGHT		4 PR #24 PP FRPVC
1752A 0061000	1,000 FT	26.000 LB	BLUE, LIGHT	C	4 PR #24 PP FRPVC
1752A 007U1000	1,000 FT	24.000 LB	VIOLET		4 PR #24 PP FRPVC
1752A 0071000	1,000 FT	26.000 LB	VIOLET	C	4 PR #24 PP FRPVC
1752A 010U1000	1,000 FT	24.000 LB	BLACK		4 PR #24 PP FRPVC
1752A 0101000	1,000 FT	26.000 LB	BLACK	C	4 PR #24 PP FRPVC

**Notes:**

C = CRATE REEL PUT-UP.

# DataTwist® 350 UTP Patch Cable

TIA/EIA-568-B.2, Category 5e

Enhanced Category 5e Bonded-Pair Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Nominal OD		Max. DCR (Ω/ 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm										

**24 AWG Bonded-Pairs** Stranded (7x32) Tinned Copper Conductors • RJ-45 Compatible • See Color Code Chart (below)

**Non-Plenum • Polyolefin Insulation • PVC Jacket** (Available in Red, Orange, Yellow, Green, Blue, Purple, Black or Gray)

Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	U-1000	U-304.8	24.0	10.9	.220	5.59	9.0	3.0	66.0	1	2.4	65.3	62.9	60.8	100±12	20.0	
1752A	NEC:	4	1000	304.8	26.0	11.8						4	4.8	56.3	51.5	48.7	100±12	23.0	
	CM												8	6.8	51.8	45.0	42.7	100±12	24.5
	CEC:												10	7.7	50.3	42.6	40.8	100±12	25.0
	CM												16	9.7	47.3	37.5	36.7	100±12	25.0
													25	12.4	44.3	31.9	32.8	100±15	24.3
													31.25	13.9	42.9	29.0	30.9	100±15	23.6
													62.5	20.2	38.4	18.3	24.9	100±15	21.5
													100	26.0	35.3	9.2	20.8	100±15	20.1
													155	33.2	32.5	—	16.9	100±18	19.0
													200	38.4	30.8	—	14.7	100±20	19.0
											250	43.7	29.3	—	12.8	100±20	18.0		
											350	53.2	27.2	—	9.9	100±22	17.0		

Jacket sequentially marked at 2 ft. intervals.  
 U.S. Patents 5,606,151; 5,734,126 and 5,763,823  
 Third party verified to TIA/EIA-568-B.2, Category 5e Patch

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

### Color Codes: DataTwist 350 Patch

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

