



## Description:

24 AWG solid bare copper conductors, polyolefin insulation, film tape separator, PVC jacket with ripcord, sequential footage marking every two feet.

## Usage (Overall)

**Suitable Applications:** Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM

## Physical Characteristics (Overall)

### Conductor

**AWG:**

# Pairs	AWG	Stranding	Conductor Material
4	24	Solid	BC - Bare 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

**Outer Jacket Ripcord:** Yes

### Overall Cabling

**Overall Cabling Fillers:** Center Tape

**Overall Nominal Diameter:** 0.221 in.

### Pair

**Pair Color Code Chart:**

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

## Mechanical Characteristics (Overall)

**Bulk Cable Weight:** 23 lbs/1000 ft.

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

**Min. Bend Radius (Install)/Minor Axis:** 0.500 in.

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

CEC/C(UL) Specification:	CMR
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.2-1 Category 6
Other Specification:	Third party verified to Category 6

### Flame Test

UL Flame Test:	UL1666 Riser
CSA Flame Test:	FT4

### Plenum/Non-Plenum

Plenum Number:	7882A
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## Electrical Characteristics (Overall)

### Nom. Mutual Capacitance:

Capacitance (pF/ft)
15

### Nominal Velocity of Propagation:

VP (%)
70

Maximum Capacitance Unbalance (pF/100 m): 330

### Maximum Delay:

Delay (ns/100 m)
537 @ 100MHz

### Max. Delay Skew:

Delay Skew (ns/100 m)
45

### Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
8.2

### Max. Operating Voltage - UL:

Voltage
300 V RMS

### Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)
5

## Electrical Characteristics-Premise (Overall)

### Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)	Min. SRL (dB)
1	2.000	74.3	72.3	72.3	70.3	20.000	na
4	3.800	65.3	63.3	61.5	59.5	23.000	na
8	5.300	60.8	58.8	55.4	53.4	24.500	na

## 7881A Multi-Conductor - Category 6 UTP Cables

10	6.000	59.3	57.3	53.3	51.3	25.000	na
16	7.600	56.2	54.3	48.7	46.7	25.000	na
20	8.500	54.8	52.8	46.3	44.3	25.000	na
25	9.500	53.3	51.3	43.8	41.8	24.300	na
31.25	10.700	51.9	49.9	41.2	39.2	23.600	na
62.5	15.400	47.4	45.4	32.0	30.0	21.500	na
100	19.800	44.3	42.3	24.5	22.5	20.100	na
155	25.200	41.5	39.5	16.3	14.3	18.800	na
200	29.000	39.8	37.8	10.8	8.8	18.000	na
250	32.800	38.3	36.3	5.5	3.5	17.300	na
300	36.400	37.1	35.1	0.7		16.800	na
350	39.800	36.1	34.1			16.300	na
400	43.000	35.3	33.3			15.900	na
500	48.900	33.8	31.8			15.200	na
550	51.800	33.2	31.2			14.900	na

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	67.8	64.8
4	100 ± 15	100 ± 15	55.8	52.7
8	100 ± 15	100 ± 15	49.7	46.7
10	100 ± 15	100 ± 15	47.8	44.8
16	100 ± 15	100 ± 15	43.7	40.7
20	100 ± 15	100 ± 15	41.8	38.8
25	100 ± 15	100 ± 15	39.8	36.8
31.25	100 ± 15	100 ± 15	37.9	34.9
62.5	100 ± 15	100 ± 15	31.9	28.9
100	100 ± 15	100 ± 15	27.8	24.8
155	100 ± 20	100 ± 15	23.9	20.9
200	100 ± 20	100 ± 15	21.8	18.8
250	100 ± 20	100 ± 15	19.8	16.8
300	100 ± 25	100 ± 15	18.3	15.3
350	100 ± 25	100 ± 15	16.9	13.9
400	100 ± 25	100 ± 15	15.8	12.8
500	100 ± 25	100 ± 15	13.8	10.8
550	100 ± 25	100 ± 15		

### Notes (Overall)

**Notes:** Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-B.2-1, Category 6. Values above 250 MHz are for Engineering Information Only. US Patents 5424491, 6570095, 6998537.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7881A 002A1000	1,000 FT	31.000 LB	RED		4 PR #24 PO FRPVC
7881A 0021000	1,000 FT	29.000 LB	RED		4 PR #24 PO FRPVC
7881A 003A1000	1,000 FT	31.000 LB	ORANGE		4 PR #24 PO FRPVC
7881A 0031000	1,000 FT	29.000 LB	ORANGE		4 PR #24 PO FRPVC
7881A 004A1000	1,000 FT	31.000 LB	YELLOW		4 PR #24 PO FRPVC
7881A 0041000	1,000 FT	29.000 LB	YELLOW	C	4 PR #24 PO FRPVC
7881A 005A1000	1,000 FT	31.000 LB	GREEN, DARK		4 PR #24 PO FRPVC
7881A 0051000	1,000 FT	29.000 LB	GREEN, DARK	C	4 PR #24 PO FRPVC
7881A 006A1000	1,000 FT	31.000 LB	BLUE, LIGHT		4 PR #24 PO FRPVC
7881A 0061000	1,000 FT	29.000 LB	BLUE, LIGHT	C	4 PR #24 PO FRPVC
7881A 007A1000	1,000 FT	31.000 LB	VIOLET		4 PR #24 PO FRPVC
7881A 0071000	1,000 FT	29.000 LB	VIOLET	C	4 PR #24 PO FRPVC
7881A 008A1000	1,000 FT	31.000 LB	GRAY		4 PR #24 PO FRPVC
7881A 0081000	1,000 FT	29.000 LB	GRAY	C	4 PR #24 PO FRPVC
7881A 009A1000	1,000 FT	31.000 LB	WHITE		4 PR #24 PO FRPVC
7881A 0091000	1,000 FT	29.000 LB	WHITE	C	4 PR #24 PO FRPVC
7881A 010A1000	1,000 FT	31.000 LB	BLACK		4 PR #24 PO FRPVC

## 7881A Multi-Conductor - Category 6 UTP Cables

7881A 0101000	1,000 FT	29.000 LB	BLACK	C	4 PR #24 PO FRPVC
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**Notes:**

C = CRATE REEL PUT-UP.

# Security UTP Cable

CCTV Fixed and PTZ Applications  
Riser-Rated



### Non-Plenum

CM FT1 or CMR FT4 Rated

### Product Description

Solid bare copper conductors, unshielded twisted pairs, polyolefin insulation, PVC jacket with rip cord. Sequential footage marking every two feet.

### Specifications

<b>Conductor</b>	Solid Bare Copper
<b>Shield</b>	Unshielded
<b>Jacket</b>	PVC
<b>Approvals</b>	CM or CMR NEC CEC CM FT1 or CMR FT4
<b>Nominal Impedance</b>	100Ω
<b>Temperature Rating</b>	80°C

### Applications:

- 100BaseTX
- 100BaseVG ANYLAN
- 155ATM
- 622ATM
- AES/EBU
- Digital Video, RS-422
- Gigabit Ethernet
- NTSC/PAL Component or Composite Video
- Premise Horizontal Cable
- CCTV UTP
- PTZ
- Pan/Tilt/Zoom



Part No.	Component Descriptions	Insulation Material	Insulation Nominal OD		Nominal OD		Standard Lengths		Standard Unit Weight	
			Inch	mm	Inch	mm	Ft.	m	Lbs.	kg

### Non-Plenum (NEC CM and CEC CM FT1)

Category 5e										
<b>1583A</b> <small>NEW</small>	4-Pair UTP	Polyolefin	.008	0.20	.195	4.95	U-1000	U-305	21.0	9.5
	24 AWG						1000	305	21.0	9.5
	Solid						1640	500	34.4	15.7
	Bare Copper Cond.						3000	915	63.0	28.6
<b>1500A</b> <small>NEW</small>	4-Pair UTP	Polyolefin	.008	0.20	.200	5.08	A-1000	A-305	26.0	11.8
	24 AWG						1000	305	23.0	10.4
	Solid									
	Bare Copper Cond.									

### Non-Plenum (NEC CMR and CEC CMR FT4)

Category 5e										
<b>1583R</b> <small>NEW</small>	4-Pair UTP	Polyolefin	.007	0.18	.197	5.00	U-1000	U-305	22.0	10.0
	24 AWG						1000	305	22.0	10.0
	Solid						3000	915	63.0	28.6
	Bare Copper Cond.									
<b>1500R</b> <small>NEW</small>	4-Pair UTP	Polyolefin	.007	0.18	.194	5.00	A-1000	A-305	27.0	12.2
	24 AWG						1000	305	24.0	10.9
	Solid									
	Bare Copper Cond.									
Category 6										
<b>7881A</b> <small>NEW</small>	4-Pair UTP	Polyolefin	.010	0.18	.235	5.97	A-1000	A-305	33.0	15.0
	23 AWG						1000	305	30.0	13.6
	Solid									
	Bare Copper Cond.									

UTP = Unshielded Twisted Pair

### Color Code Chart

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