

1583A Multi-Conductor - Category 5e Unbonded-Pair Cable



Description:

24 AWG solid bare copper conductors, polyolefin insulation, twisted pairs, rip cord, PVC jacket.

Usage (Overall)

Suitable Applications: Horizontal Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Video, RS-422

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 Nominal Diameter: 0.189 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)

Storage Temperature Range: -20°C To +75°C

Installation Temperature Range: 0°C To +60°C

Operating Temperature Range: -20°C To +60°C

Bulk Cable Weight: 20 lbs/1000 ft.

Max. Recommended Pulling Tension: 35 lbs.

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

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Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR
NEC Articles:	800
CEC/C(UL) Specification:	CMR
Other Standards:	11801 Category 5
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
Other Specification:	NEMA WC-63.1 Category 5e, UL verified to Category 5e

Flame Test

UL Flame Test:	UL1666 Riser, UL1685 FT4/IEEE 1202 Vertical Tray Flame Test
CSA Flame Test:	FT4

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Aerial:	No
Suitability - Burial:	No
Sunlight Resistance:	No
Oil Resistance:	No
Non-halogenated:	No

Plenum/Non-Plenum

Plenum (Y/N):	No
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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)

538 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m)

45

Maximum Conductor DC Resistance:

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DCR @ 20°C (Ohm/100 m)

9.38

Max. Operating Voltage - UL:

Voltage

300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

3

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)
1	2.000	65.3	62.3	63.0	60.3	20.000
4	4.100	56.3	53.3	51.0	49.2	23.000
8	5.800	51.8	48.8	46.0	43.0	24.500
10	6.500	50.3	47.3	43.0	40.8	25.000
16	8.200	47.3	44.3	39.0	36.0	25.000
20	9.300	45.8	42.8	36.5	33.5	25.000
25	10.400	44.3	41.3	33.9	30.9	24.300
31.25	11.700	42.9	39.9	31.0	28.2	23.600
62.5	17.000	38.4	35.4	22.0	19.0	21.500
100	22.000	35.3	32.3	14.0	10.3	20.100
155	28.100	32.5	29.5	4.4	1.4	15.800
200	32.400	30.8	27.8	4.0	1.0	15.000

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	63.8	60.8
4	100 ± 15	51.7	48.7
8	100 ± 15	45.7	42.7
10	100 ± 15	43.8	40.8
16	100 ± 15	39.7	36.7
20	100 ± 15	37.7	34.7
25	100 ± 15	35.8	32.8
31.25	100 ± 15	33.9	30.9
62.5	100 ± 15	27.8	24.9
100	100 ± 15	23.8	20.8
155	100 ± 25	19.9	16.9
200	100 ± 25	17.7	14.7

Notes (Overall)

Notes: Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-B.2, Category 5e.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1583A 002U1000	1,000 FT	21.000 LB	RED		4 PR #24 PO PVC
1583A 0021000	1,000 FT	21.000 LB	RED	C	4 PR #24 PO PVC
1583A 003U1000	1,000 FT	21.000 LB	ORANGE		4 PR #24 PO PVC
1583A 0031000	1,000 FT	21.000 LB	ORANGE	C	4 PR #24 PO PVC
1583A 004U1000	1,000 FT	21.000 LB	YELLOW		4 PR #24 PO PVC
1583A 0041000	1,000 FT	19.000 LB	YELLOW	C	4 PR #24 PO PVC
1583A 005U1000	1,000 FT	20.000 LB	GREEN, DARK		4 PR #24 PO PVC
1583A 0051000	1,000 FT	19.000 LB	GREEN, DARK	C	4 PR #24 PO PVC
1583A 006U1000	1,000 FT	21.000 LB	BLUE, LIGHT		4 PR #24 PO PVC
1583A 0061000	1,000 FT	19.000 LB	BLUE, LIGHT	C	4 PR #24 PO PVC
1583A 0061640	1,640 FT	34.440 LB	BLUE, LIGHT		4 PR #24 PO PVC
1583A 0063000	3,000 FT	60.000 LB	BLUE, LIGHT	C	4 PR #24 PO PVC
1583A 008U1000	1,000 FT	20.000 LB	GRAY	C	4 PR #24 PO PVC

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1583A 0081000	1,000 FT	21.000 LB	GRAY	C	4 PR #24 PO PVC
1583A 0081640	1,640 FT	34.440 LB	GRAY	C	4 PR #24 PO PVC
1583A 0083000	3,000 FT	60.000 LB	GRAY	C	4 PR #24 PO PVC
1583A 009U1000	1,000 FT	21.000 LB	WHITE		4 PR #24 PO PVC
1583A 0091000	1,000 FT	19.000 LB	WHITE	C	4 PR #24 PO PVC
1583A 0093000	3,000 FT	60.000 LB	WHITE	C	4 PR #24 PO PVC
1583A 010U1000	1,000 FT	21.000 LB	BLACK		4 PR #24 PO PVC
1583A 0101000	1,000 FT	21.000 LB	BLACK	C	4 PR #24 PO PVC
1583A 012U1000	1,000 FT	21.000 LB	PINK		4 PR #24 PO PVC
1583A 0121000	1,000 FT	21.000 LB	PINK	C	4 PR #24 PO PVC

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

Conductor	Solid Bare Copper
Shield	Unshielded
Jacket	PVC
Approvals	CM or CMR NEC CEC CM FT1 or CMR FT4
Nominal Impedance	100Ω
Temperature Rating	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										
1583A <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
1500A <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										
1583R <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.									
1500R <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										
7881A <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