

## 1300SB Multi-Conductor - Category 5e ScTP Shipboard ABS Type Approved



### Description:

24 AWG solid bare copper conductors, polypropylene insulation, overall Beldfoil® shield, 24 AWG stranded tinned copper drain wire, low smoke zero halogen jacket.

### Usage (Overall)

**Suitable Applications:** Shipboard LAN/Data, WI-FI, Wireless LAN, Outdoor Antenna, Radio, Broadband, RF, Where ABS Type Approval is Required

### Physical Characteristics (Overall)

#### Conductor

**AWG:**

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

#### Insulation

**Insulation Material:**

Insulation Material	Wall Thickness (in.)	Dia. (in.)
PP - Polypropylene	.010	.042

#### Outer Shield

**Outer Shield Material:**

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

**Outer Shield Drain Wire AWG:**

AWG	Stranding	Drain Wire	Conductor Material
24	7x32	TC - Tinned Copper	

#### Outer Jacket

**Outer Jacket Material:**

Outer Jacket Material
LSZH - Low Smoke Zero Halogen

#### Overall Cabling

**Overall Nominal Diameter:** 0.260 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:** -30°C To +105°C

**Bulk Cable Weight:** 32.400 lbs/1000 ft.

**Max. Recommended Pulling Tension:** 25 lbs.

**Min. Bend Radius (Install)/Minor Axis:** 1 in.

## 1300SB Multi-Conductor - Category 5e ScTP Shipboard ABS Type Approved

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMG-LS
CEC/C(UL) Specification:	CMG-LS
IEEE Specification:	Std. 45 clause 23
Other Standards:	11801 Category 5, 60092-376 clause 17, 60092-351, 60754-1, 60754-2, 61034
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):	08/01/2005
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 444, ABS Type Approval Certificate 05-HS50072A/1-PDA

#### Flame Test

UL Flame Test:	UL1685 FT4 Loading, Limited Smoke
C(UL) Flame Test:	FT4, Limited Smoke
IEC Flame Test:	60332-3-22 (Category A)
IEEE Flame Test:	1202

#### Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Sunlight Resistance:	Yes

### 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:

DCR @ 20°C (Ohm/100 m)  
9.38

#### Max. Operating Voltage - UL:

Voltage  
300 V RMS

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**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)	Min. SRL (dB)
1	2.0	65.3	62.3	60.3	60.3	20.0	20.0
4	4.1	56.3	53.3	49.2	49.2	23.0	23.0
8	5.8	51.8	48.8	43.0	43.0	24.5	24.5
10	6.5	50.3	47.3	40.8	40.8	25.0	25.0
16	8.2	47.3	44.3	36.1	36.1	25.0	25.0
20	9.3	45.8	42.8	33.5	33.5	25.0	25.0
25	10.4	44.3	41.3	30.9	30.9	24.3	24.3
31.25	11.7	42.9	39.9	28.2	28.2	23.6	23.6
62.5	17.0	38.4	35.4	18.4	18.4	21.5	21.5
100	22.0	35.3	32.3	10.3	10.3	20.1	20.1

**Premise Cable Electrical Table 2:**

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	63.8	60.8
4	100 ± 15	100 ± 15	51.7	48.7
8	100 ± 15	100 ± 15	45.7	42.7
10	100 ± 15	100 ± 15	43.8	40.8
16	100 ± 15	100 ± 15	39.7	36.7
20	100 ± 15	100 ± 15	37.7	34.7
25	100 ± 15	100 ± 15	35.8	32.8
31.25	100 ± 15	100 ± 15	33.9	30.9
62.5	100 ± 15	100 ± 15	27.8	24.8
100	100 ± 15	100 ± 15	23.8	20.8

### Notes (Overall)

**Notes:** RJ-45 Compatible. Jacket sequentially marked at 2 ft. intervals.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1300SB 0101000	1,000 FT	35.000 LB	BLACK	C	4 PR #24 PP FS FRNHPO

**Notes:**

C = CRATE REEL PUT-UP.

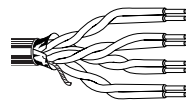
# DataTwist® 5e ScTP Cable

TIA/EIA-568-B.2, Category 5e Nonbonded-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 Solid Bare Copper Conductors • Twisted Pairs • Overall Beldfoil® Shield • Drain Wire\* • RJ-45 Compatible • See Color Code Chart (below)**

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

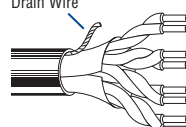
1533R		NEC:	4	1000	304.8	34.0	15.5	.260	6.60	9.38	3.0	330	1	2.0	62.3	60	60.8	100±15	20.0
		CMR		A-1000	A-304.8	37.0	16.8						4	4.1	53.3	49	48.7	100±15	23.0
		CEC:		1640†	500.0	57.4	26.1						8	5.8	48.8	43	42.7	100±15	24.5
		CMR											10	6.5	47.3	41	40.8	100±15	25.0
													16	8.2	44.3	36	36.7	100±15	25.0
													20	9.3	42.8	34	34.7	100±15	25.0
													25	10.4	41.3	31	32.8	100±15	24.3
													31.25	11.7	39.9	28	30.9	100±15	23.6
													62.5	17.0	35.4	18	24.8	100±15	21.5
												100	22.0	32.3	10	20.8	100±15	20.1	

†1640 ft. put-up available in Gray only.

Shield is bonded to jacket inner wall for electrical stability.

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

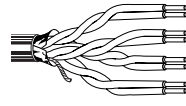
**Non-Plenum • Polypropylene Insulation (Color Code: See Chart Below) • Black Low-Smoke, Zero-Halogen Jacket**

300V RMS		1300SB	NEC:	4	1000	304.8	35.0	15.9	.260	6.60	9.3	3.0	330	1	2.0	62.3	60	60.8	100±15	20.0
		<b>new</b>	CMG-LS										4	4.1	53.3	49	48.7	100±15	23.0	
			CEC:										8	5.8	48.8	43	42.7	100±15	24.5	
			CMG-LS FT4										10	6.5	47.3	41	40.8	100±15	25.0	
			Limited Smoke										16	8.2	44.3	36	36.7	100±15	25.0	
													20	9.3	42.8	34	34.7	100±15	25.0	
													25	10.4	41.3	31	32.8	100±15	24.3	
													31.25	11.7	39.9	28	30.9	100±15	23.6	
													62.5	17.0	35.4	18	24.8	100±15	21.5	
												100	22.0	32.3	10	20.8	100±15	20.1		

**LSZH and ABS Type Approved**

Jacket sequentially marked at 2 ft. intervals.

**Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Available in Red, Orange, Yellow, Green, Blue, Gray, Black or Natural)**

1533P		NEC:	4	1000	304.8	35.0	15.9	.235	6.00	9.38	3.0	330	1	2.0	62.3	60	60.8	100±15	20.0
		CMP		A-1000	A-304.8	38.0	17.2						4	4.1	53.3	49	48.7	100±15	23.0
		CEC:											8	5.8	48.8	43	42.7	100±15	24.5
		CMP											10	6.5	47.3	41	40.8	100±15	25.0
													16	8.2	44.3	36	36.7	100±15	25.0
													20	9.3	42.8	34	34.7	100±15	25.0
													25	10.4	41.3	31	32.8	100±15	24.3
													31.25	11.7	39.9	28	30.9	100±15	23.6
													62.5	17.0	35.4	18	24.8	100±15	21.5
												100	22.0	32.3	10	20.8	100±15	20.1	

Shield is bonded to jacket inner wall for electrical stability.

Jacket sequentially marked at 2 ft. intervals.

Third party verified to TIA/EIA-568-B.2, Category 5e

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

\*Drain wire is 24 AWG stranded tinned copper.

**Color Codes: DataTwist 5e ScTP**

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

Teflon is a DuPont trademark.

