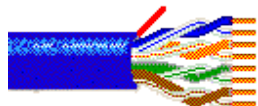


## HC2500R Multi-Conductor - DataTwist® Category 5e



**Obsolete  
Call  
1-800-BELDEN1**

For more Information  
please call

1-800-Belden1

**Description:**

4 Pair UTP, 200MHz Category 5e, Riser Rated, 24 AWG Solid Bare Copper, Polyolefin Insulation, PVC Jacket, Rip Cord, Sequential Marking at Two Foot Intervals

**Usage (Overall)****Suitable Applications:**

Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG  
 ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video,  
 AES/EBU Digital Audio, AES51, 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:**

0.197 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:**

29 lbs/1000 ft.

**Max. Recommended Pulling Tension:**

35 lbs.

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

0.500 in.

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**HC2500R Multi-Conductor - DataTwist® Category 5e**


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**Applicable Specifications and Agency Compliance (Overall)**
**Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMR
Other Standards:	11801 Category 5
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:	ANSI/TIA/EIA-568-B.2 Cat 5e
Other Specification:	NEMA WC-63.1 Category 5e, UL Verified to Category 5e

**Flame Test**

UL Flame Test:	UL1666 Riser
CSA Flame Test:	FT4

**Plenum/Non-Plenum**

Plenum (Y/N):	No
Plenum Number:	1585A
Non-Plenum Number:	1583A

**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

**Maximum DCR Unbalanced:**

DCR Unbalance @ 20°C (%)

3

## HC2500R Multi-Conductor - DataTwist® Category 5e

## 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	63.0	60.0	20.0	23
4	4.1	56.3	53.3	51.0	49.0	23.0	23.0
8	5.8	51.8	48.8	46.0	43.0	24.5	24.5
10	6.5	50.3	47.3	43.0	41.0	25.0	25.0
16	8.2	47.3	44.3	39.0	36.0	25.0	25.0
20	9.3	45.8	42.8	36.5	33.5	25.0	25.0
25	10.4	44.3	41.3	33.9	30.9	24.3	24.3
31.25	11.7	42.9	39.9	31.0	28.0	23.6	23.6
62.5	17.0	38.4	35.4	22.0	19.0	21.5	21.5
100	22.0	35.3	32.3	14.0	11.0	20.1	20.1
155	28.1	32.5	29.5	4.4	1.4	15.8	
200	32.0	30.8	27.8	4.0	1.0	15.0	

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
155	100 ± 25	100 ± 15	19.9	16.9
200	100 ± 25	100 ± 15	17.7	14.7

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
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