

## HC2501R Multi-Conductor - DataTwist® Enhanced Category 5e

For more Information  
please call

1-800-Belden1



**Picture  
Not Available**

**Description:**

4 Pair UTP, 350MHz Enhanced Category 5e, Riser Rated, 24 AWG Solid Bare Copper, Polyolefin Insulation, Flexible 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 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 Cable****Overall Nominal Diameter:**

0.194 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:**

25 lbs.

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

0.800 in.

## HC2501R Multi-Conductor - DataTwist® Enhanced Category 5e

## Applicable Specifications and Agency Compliance (Overall)

## Applicable Standards &amp; 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 Category 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:	1501A
Non-Plenum Number:	1500A

## Electrical Characteristics (Overall)

## Nom. Mutual Capacitance:

Capacitance (pF/ft)

15

Maximum Capacitance Unbalance (pF/100 m): 66

## Nominal Velocity of Propagation:

VP (%)

70

## Maximum Delay:

Delay (ns/100 m)

510

## Max. Delay Skew:

Delay Skew (ns/100 m)

25

## Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)

9

## Max. Operating Voltage - UL:

Voltage

300 V RMS

## Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

3

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## 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	2.0	65.3	65.3	63.3	63.3	20.0
4	4.0	56.3	56.3	52.3	52.3	23.0
8	5.7	51.8	51.8	46.1	46.1	24.5
10	6.4	50.3	50.3	43.9	43.9	25.0
16	8.1	47.3	47.3	39.1	39.1	25.0
20	9.2	45.8	45.8	35.2	35.2	25.0
25	10.3	44.3	44.3	34.1	34.1	24.3
31.25	11.6	42.9	42.9	31.3	31.3	23.6
62.5	16.8	38.4	38.4	21.6	21.6	21.5
100	21.7	35.3	35.3	17.1	17.1	20.1
155	27.7	32.5	32.5	4.7	4.7	19.0
200	32.0	30.8	30.8	3.0	3.0	19.0
250	36.4	29.3	29.3			18.0
300	40.5	28.2	28.2			18.0
310	41.3	27.9	27.9			18.0
350	44.3	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	24.8
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

## Related Documents:

No related documents are available for this product

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
HC2501RF6HA1000	1,000 FT	27.000 LB	GRAY, DARK PEARL		4 PR #24 PP PVC
HC2501R006A1000	1,000 FT	27.000 LB	BLUE, LIGHT		4 PR #24 PP PVC

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