



Product: [IBDN25R](#) 

CAT5e Backbone, 25pr, UTP, PVC Jkt, CMR

Product Description

CAT5 (100MHz), 25-Pair, U/UTP-unshielded, Riser-CMR, Premise Backbone Cable, 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, PVC jacket

Technical Specifications

Product Overview

Suitable Applications:	Premise Backbone Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, Noisy Environments
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
24	Solid	BC - Bare Copper	25
Conductor Count:			50
Total Number of Pairs:			25

Insulation

Material	
Polyolefin	
Bonded-Pair:	N/A

Color Chart

Number	Color
1	White & Blue
2	White & Orange
3	White & Green
4	White & Brown
5	White & Gray
6	Red & Blue
7	Red & Orange
8	Red & Green
9	Red & Brown
10	Red & Gray
11	Black & Blue
12	Black & Orange
13	Black & Green
14	Black & Brown
15	Black & Gray
16	Yellow & Blue
17	Yellow & Orange
18	Yellow & Green
19	Yellow & Brown
20	Yellow & Gray
21	Purple & Blue

22	Purple & Orange
23	Purple & Green
24	Purple & Brown
25	Purple & Gray

Outer Jacket Material

Material	Nominal Diameter	Ripcord
PVC - Polyvinyl Chloride	0.510 in	Yes

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
93.8 Ohm/km	5 %

Capacitance

Max. Capacitance Unbalance	Nom.Mutual Capacitance
330 pF/100m	14 pF/ft

Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
100 MHz	537.6 ns/100m	45 ns/100m	68 %

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. PSNEXT [dB]	Min. RL (Return Loss) [dB]	Max./Min. Fitted Impedance
1 MHz	2.0 dB/100m	62.3 dB	20.0 dB	100 ± 15%
4 MHz	4.1 dB/100m	53.3 dB	23.0 dB	100 ± 15%
8 MHz	5.8 dB/100m	48.8 dB	24.5 dB	100 ± 15%
10 MHz	6.5 dB/100m	47.3 dB	25.0 dB	100 ± 15%
16 MHz	8.2 dB/100m	44.3 dB	25.0 dB	100 ± 15%
20 MHz	9.3 dB/100m	42.8 dB	25.0 dB	100 ± 15%
25 MHz	10.4 dB/100m	41.3 dB	24.3 dB	100 ± 15%
31.25 MHz	11.7 dB/100m	39.9 dB	23.6 dB	100 ± 15%
62.5 MHz	17.0 dB/100m	35.4 dB	21.5 dB	100 ± 15%
100 MHz	22.0 dB/100m	32.3 dB	20.1 dB	100 ± 15%

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Installation Temp Range:	0°C To +60°C
UL Temp Rating:	60°C
Storage Temp Range:	-30°C To +60°C
Operating Temp Range:	-30°C To +60°C

Mechanical Characteristics

Bulk Cable Weight:	146 lbs/1000ft
Max Recommended Pulling Tension:	150 lbs
Min Bend Radius During Installation:	10.25 in
Min Bend Radius/Minor Axis:	5.25 in

Standards

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMR
ISO/IEC Compliance:	11801 ed 2.2 (2011) Class D
CPR Euroclass:	Fca
Data Category:	Category 5e
ANSI Compliance:	S-90-661-2012 Category 5e, ANSI/NEMA WC-63.1 Category 5e
Telecommunications Standards:	ANSI/TIA-568-C.2 Category 5e
IEEE Specification:	IEEE 802.3bt Type 1, Type 2, Type 3

Third Party Performance Verification:	Category 5e
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Applicable Environmental and Other Programs

Environmental Space:	Riser
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	Yes
EU CE Mark:	Yes
EU REACH SVHC Compliance (yyyy-mm-dd):	2017-07-10
EU RoHS Compliance Date (yyyy-mm-dd):	2008-06-24
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	No
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	No
Suitability - Oil Resistance:	No
Suitability - Outdoor:	No
Suitability - Sunlight Resistance:	No

Flammability, LS0H, Toxicity Testing

C(UL) Flammability:	FT4
UL Flammability:	UL 1666 Riser
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	IBDN25P

Part Number

Variants

Item #	Color	Putup Type	Length	UPC
IBDN25R 006500	Blue	Reel	500 ft	612825061922
IBDN25R 006500	Blue	Reel	500 ft	612825061922
IBDN25R 008CUT	Gray	Cut to Length		612825061908
IBDN25R 008CUT	Gray	Cut to Length	1 ft	612825061908
IBDN25R 0081000	Gray	Reel	1,000 ft	612825061915
IBDN25R 0081000	Gray	Reel	1,000 ft	612825061915
IBDN25R 0085000	Gray	Reel	5,000 ft	612825061946

Patent:	https://www.belden.com/resources/patents
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Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Print Includes Descending Footage/Meter Markings.
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History

Update and Revision:	Revision Number: 0.328 Revision Date: 04-28-2020
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