



Product: [50106U](#)

Paired - Category 6 U/UTP Unbonded – Pair Cable

Product Description

24 AWG solid bare copper conductors, non-plenum, Polyolefin insulation, twisted pairs, central spline, rip cord, see color code chart (below), PVC jacket.

Technical Specifications

Product Overview

Suitable Applications:	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, 250MHz Category 6
------------------------	---

Construction Details

Conductor

Size	Stranding	Material	No. of Pairs	No. of Elements
24 AWG	Solid	BC - Bare Copper	4	8

Insulation

Material	Color Code
PO - Polyolefin	Blue & White with Blue Markings, Orange & White with Orange Markings, Green & White with Green Markings, Brown & White with Brown Markings

Cable Core

Description
Overall Cabling Fillers

Outer Jacket

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	6.3 mm (0.25 in)	Yes

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
93.8 Ohm/km (28.6 Ohm/1000ft)	56 pF/m (17 pF/ft)	330 pF/100m	100 Ohm

Delay

Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
538 ns/100m	45 ns/100m	70%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]
1	2 dB/100m	74.3	72.3	67.8	64.8	20
4	3.8 dB/100m	65.3	63.3	55.8	52.8	23
8	5.3 dB/100m	60.8	58.8	49.7	46.7	24.5
10	6 dB/100m	59.3	57.3	47.8	44.8	25
16	7.6 dB/100m	56.2	54.2	43.7	40.7	25
20	8.5 dB/100m	54.8	52.8	41.8	38.8	25
25	9.5 dB/100m	53.3	51.3	39.8	36.8	24.3
31.25	10.7 dB/100m	51.9	49.9	37.9	34.9	23.6

62.5	15.4 dB/100m	47.4	45.4	31.9	28.9	21.5
100	19.8 dB/100m	44.3	42.3	27.8	24.8	20.1
155	25.2 dB/100m	41.4	39.4	24	21	18.8
200	29 dB/100m	39.8	37.8	21.8	18.8	18
250	32.8 dB/100m	38.3	36.3	19.8	16.8	17.3

Voltage

UL Voltage Rating
72 V DC

Mechanical Characteristics

Temperature

Operating
-20°C To +75°C

Bend Radius

Installation Min.
50.4 mm (1.98 in)

Max. Pull Tension:	110 N (25 lbf)
Bulk Cable Weight:	47 kg/km (32 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL1685 UL Loading, IEC 60332-3-25
NEC / UL Compliance:	CM
CEC / C(UL) Compliance:	CM
Data Category:	Category 6
TIA/EIA Compliance:	TIA-568.2-D Category 6
ISO/IEC Compliance:	ISO/IEC 11801 Cat 6

Product Notes

Notes:	Jacket sequentially marked
--------	----------------------------

History

Update and Revision:	Revision Number: 0.29 Revision Date: 08-13-2024
----------------------	---

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
50106U-A305	Black	Reel	305 m	8719605204639
50106U 010305M	Black		305 m	
50106U 006305M	Blue		305 m	
50106U 008305M	Gray		305 m	

© 2025 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.