

Product Specifications

Product Family	Zybrnet 500
Category	Cat.6
Product	Cat. 6 U/UTP 24AWG X 4P Solid Eca
Item no.	ZN500BC115xx
Edition	1.0



Approvals

UL444 Certified ANSI/TIA-568-C.2 Class Eca Verified

Compliance

RoHS Compliant. EU Directive 2002/95/EC



Applications & Features

✓ Audio/Video transfer ✓ Bandwidth up to 250MHz ✓ 1000Mbit/s ✓ NVP value 65%

Construction & Dimensions

Conductor

Size

Material

Construction

24 AWG X 4P

Annealed Bare Copper

1 / 0.54 ± 0.01mm

Insulation

Material

Min. Average thickness

Min. thickness at any point

Diameter

Identification

HDPE

0.19 mm

0.18 mm

0.94 ± 0.03mm

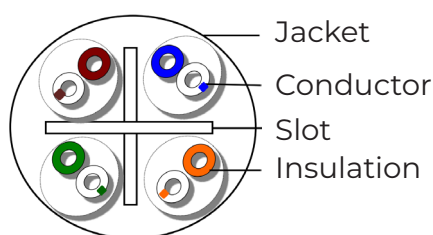
1. Blue x White / Blue

2. Orange x White / Orange

3. Green x White / Green

4. Brown x White / Brown

Cross section



Core Assembly

Core twist

Slot

Assembly pair

2 Core twist

PE

4 Pair assembly

Jacket

Material

Min. average thickness

Min. thickness at any point

Overall diameter

Color

PVC

0.45 mm

0.43 mm

5.8 ± 0.2 mm

Gray / Other Color

Electrical & Physical properties

Rating Temp
 Conductor Resistance
 Mutual Capacitance
 DC. Resistance Unbalance
 Pair-to-Ground Capacitance Unbalance
 Dielectric Strength
 Input Impedance
 Spark Test
 Cold Bend Test

75 °C
 9.38 Ω/100m 20 °C Max.
 5.6 nF/m Max.
 5% Max.
 330 pF/100m Max.
 1.5 kv / 2sec AC
 100 ±15Ω
 2.5 KV
 -20 °C x 4hrs No Crack.



Insulation

Unaged

Tensile strength
 Elongation

2400 PSI Min. (1.68kg/mm2)
 300% Min.

Aged

Tensile strength
 Elongation

Min. 75% (100°C x 48 hrs)
 Min. 75% (100°C x 48 hrs)

Jacket

Unaged

Tensile strength
 Elongation

2000 PSI Min.(1.41kg/mm2)
 100% Min.

Aged

Tensile strength
 Elongation

Min.85% (100°C x 240 hrs)
 Min. 50% (100°C x 240 hrs)

Installation temperature

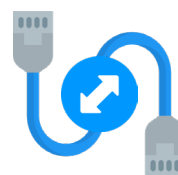
Operating temperature

Minimum bending radius

Maximum pulling tension

NVP value

0°C to 60°C
 -20°C to 60°C
 ≥ 4 times of overall diameter
 ≤ 110 N
 65%



Marking

ZN500BC115XX Class Eca ZYBRNET U/UTP CAT.6 TYPE CM 24AWG 4PR
 SOLID ANSI/TIA-568-C.2 PRESTAQ XXXM

Frequency MHz	R.L. MIN. dB/100m	Att. MAX. dB/100m	NEXT MIN. dB/100m	PSNEXT MIN. dB/100m	ACRF MIN. dB/100m	PSACRF MIN. dB/100m	Propagation MAX. ns/100m
1.00	20,0	2,0	74,3	72,3	67,8	65,0	570,0
4.00	23,0	3,8	65,3	63,3	55,8	53,0	552,0
10.00	25,0	6,0	59,3	57,3	47,8	45,0	545,4
16.00	25,0	7,6	56,2	54,2	43,7	40,9	543,0
20.00	25,0	8,5	54,8	52,8	41,8	39,0	542,0
31.25	23,6	10,7	51,9	49,9	37,9	35,1	540,4
62.50	21,5	15,4	47,4	45,4	31,9	29,1	538,6
100.00	20,1	19,8	44,3	42,3	27,8	25,0	537,6
200.00	18,0	29,0	39,8	37,8	21,8	19,0	536,5
250.00	17,3	32,8	38,3	36,3	19,8	17,0	536,3

Electrical Performance