

## Product Specifications

<b>Product Family</b>	Zybrnet 500
<b>Category</b>	Cat.6
<b>Product</b>	Cat. 6 U/UTP 24AWG X 4P Solid Eca
<b>Item no.</b>	ZN500BC115
<b>Edition</b>	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

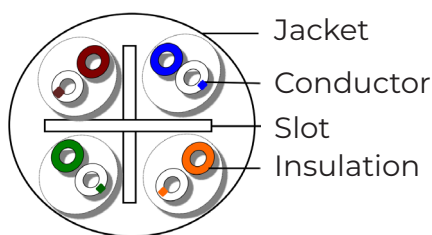
#### Conductor

<b>Size</b>	24 AWG X 4P
<b>Material</b>	Annealed Bare Copper
<b>Construction</b>	1 / 0.54 ± 0.01mm

#### Insulation

<b>Material</b>	HDPE
<b>Min. Average thickness</b>	0.19 mm
<b>Min. thickness at any point</b>	0.18 mm
<b>Diameter</b>	0.94 ± 0.03mm
<b>Identification</b>	1. Blue x White / <b>Blue</b> 2. Orange x White / <b>Orange</b> 3. Green x White / <b>Green</b> 4. Brown x White / <b>Brown</b>

#### Cross section



#### Core Assembly

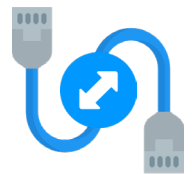
<b>Core twist</b>	2 Core twist
<b>Slot</b>	PE
<b>Assembly pair</b>	4 Pair assembly

#### Jacket

<b>Material</b>	PVC
<b>Min. average thickness</b>	0.45 mm
<b>Min. thickness at any point</b>	0.43 mm
<b>Overall diameter</b>	5.8 ± 0.2 mm
<b>Color</b>	Gray / Other Color

**Electrical & Physical properties**

Rating Temp	75 °c
Conductor Resistance	9.38 Ω/100m 20 °c Max.
Mutual Capacitance	5.6 nF/m Max.
DC. Resistance Unbalance	5% Max.
Pair-to-Ground Capacitance Unbalance	330 pF/100m Max.
Dielectric Strength	1.5 kv / 2sec AC
Input Impedance	100 ±15Ω
Spark Test	2.5 KV
Cold Bend Test	-20 °c x 4hrs No Crack.
<b>Insulation</b>	
<b>Unaged</b>	
Tensile strength	2400 PSI Min. (1.68kg/mm2)
Elongation	300% Min.
<b>Aged</b>	
Tensile strength	Min. 75% (100°C x 48 hrs)
Elongation	Min. 75% (100°C x 48 hrs)
<b>Jacket</b>	
<b>Unaged</b>	
Tensile strength	2000 PSI Min.(1.41kg/mm2)
Elongation	100% Min.
<b>Aged</b>	
Tensile strength	Min.85% (100°C x 240 hrs)
Elongation	Min. 50% (100°C x 240 hrs)
Installation temperature	0°C to 60°C
Operating temperature	-20°C to 60°C
Minimum bending radius	≥ 4 times of overall diameter
Maximum pulling tension	≤ 110 N
NVP value	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