



## OVERVIEW

Zemecs T121E series Category 6 U/UTP PE Solid LAN cables are designed and manufactured to exceed performances specified by ANSI/TIA/EIA-568-2.D, EN 50173, ISO/IEC 11801, IEC 61156-5 and EN 50288-6-1 standards up to 250 Mhz. Four twisted pairs of 23 AWG solid copper conductors are formed around a centrally located cross filler increasing the electrical performance of the cable and jacketed with a ripcord. Products with PE jacket are delivered in packages of 305 m. Box , 500 and 1.000m. reels.

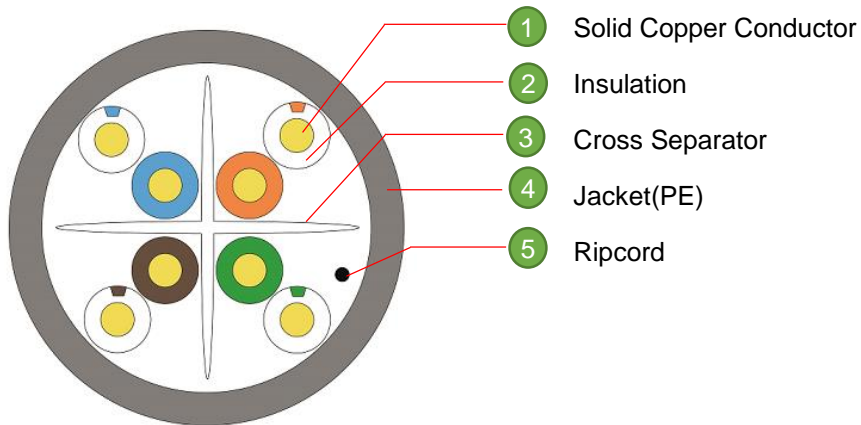
## FEATURES

- Exceeds requirements of ANSI/TIA/EIA-568-2.D, EN 50173, ISO/IEC 11801, IEC 61156-5 and EN 50288-6-1 cabling standards for channels, links and components
- Supports PoE and PoE+ applications
- Resists against heat and humidity
- Error free performance up to 1 Gigabit Ethernet at 250 Mhz.
- Offered with different jacket colour and packages
- Easy identification of remaining cable through descending cable length marking

## APPLICATIONS

- 1000 Base-T Gigabit Ethernet
- 100 Base-TX Fast Ethernet
- 10 Base-T Ethernet
- 622 Mbps ATM
- 155 Mbps ATM
- ISDN
- 4/16 Mbps Token Ring
- 100 Mbps TP-PMD
- Broadband and baseband video

## MATERIAL AND PHYSICAL SPECIFICATIONS



<b>Conductor</b>	Material	100% Bare Annealed Copper
	Size	4x2x23 AWG
	Colour	Blue x Blue/White Strip
		Orange x Orange/White Strip
		Green x Green/White Strip
		Brown x Brown/White Strip
Insulation	Polyolefin	
Insulation Diameter	1,05 ± 0,05 mm.	
<b>Central Member</b>	Type	Cross Separator
	Material	PE
<b>Jacket</b>	Material	PE(Polyethylene)
	Outer Diameter	5,90 ± 0,10 mm.
<b>Ripcord</b>	Material	Nylon



## COMPLIANCE

### Generic Cabling And Cabling Components Standards - Category 6 Requirements

- ISO/IEC 11801:2011 (V.2.2)
- IEC 61156 - 5:2012 (V. 2.1)
- EN 50173-1:2011
- EN 50173-2:2007 (Including A1:2010 amendmend)
- EN 50288-6-1:2013
- ANSI/TIA-568-2.D:2018

### Standards For The Restriction Of Use Of Hazardous Substances In Electrical And Electronic Equipments

- 2011/65/EU (RoHS-2)

## TRANSMISSION PERFORMANCE

FREQUENCY (Mhz.)	INSERTION LOSS (dB., max)	RETURN LOSS (dB., min.)	NEXT (dB., min.)	PSNEXT (dB., min.)	ACR-F (dB., min.)	PS ACR-F (dB., min.)
1	1,6	32,8	88,9	86,9	83,1	80,1
4	2,2	35,6	83,7	81,7	76,3	73,3
8	2,9	34,3	77,8	75,8	72,7	69,7
10	3,2	33,0	73,6	71,6	66,7	63,7
16	4,4	30,0	70,1	68,1	60,2	57,2
20	5,1	27,3	71,9	69,9	58,1	55,1
25	6,0	26,2	68,7	66,7	58,5	55,5
31,25	6,9	26,5	63,4	61,4	58,9	55,9
62,5	10,0	23,9	60,9	58,9	48,2	45,2
100	13,3	21,5	56,2	54,2	42,3	39,3
200	19,0	20,1	55,1	53,1	37,9	34,9
250	21,7	17,1	50,9	48,9	29,3	26,3

Typical performance data for 100m. cable tested according to IEC 61156-5 at 20°C. Actual performance may vary depending on installation and environmental conditions. Transmission performance supports 500Mhz' however data up to 250Mhz.is given.

## ENVIRONMENTAL AND PHYSICAL SPECIFICATIONS

Transportation and Storage Temperature	-20 / +80	°C
Installation Temperature	-20 / +60	°C
Operation Temperature	-20 / +60	°C
Relative Humidity	10 - 90, Non-condensing	%

## MECHANICAL SPECIFICATIONS

Tensile Strength	50	N./mm. <sup>2</sup> , Max.
Cold Bend Test @20 ± 2°C x 4 hour	No cracks occur	
Jacket Tensile Strength @ 100°C x 168 hour		
Before/After Aging	1.300 / 1.105	Psi,Min.
Jacket Elongation @ 100°C x 168 hour		
Before/After Aging	100 / 50	%,Min.
Insulation Tensile Strength@ 100°C x 48 hour		
Before/After Aging	2.400 / 1.800	Psi,Min.
Insulation Elongation @ 100°C x 48 hour		
Before/After Aging	300 / 225	%,Min.
Bending Radius		
Installation/Operation	8 / 4 x O.D.	mm.

## PART NUMBER CODING

Part Nr.	Product Description
T121E2XR	Zemecs Category 6 U/UTP 4x2x23# PE Solid LAN Cable
X: Length	
1	305m.
2	500m.
3	1.000m.

