



OVERVIEW

Zemecs T221 series Category 6 patch cords are designed and manufactured to exceed performances specified by ANSI/TIA/EIA-568-2.D, EN 50173, ISO/IEC 11801-1:2017, IEC 61935-2 and IEC 60512-99-001 standards up to 250 Mhz. The products are constructed by terminating 4 twisted pairs of 24# stranded cable around a centrally located cross filler with 50µ" gold plated RJ-45 plugs at both ends.

The cords offered under 9 different jacket colours and lengths starting from 0,25 m. are covered within Zemecs' 25 year system performance guarantee programme.

FEATURES

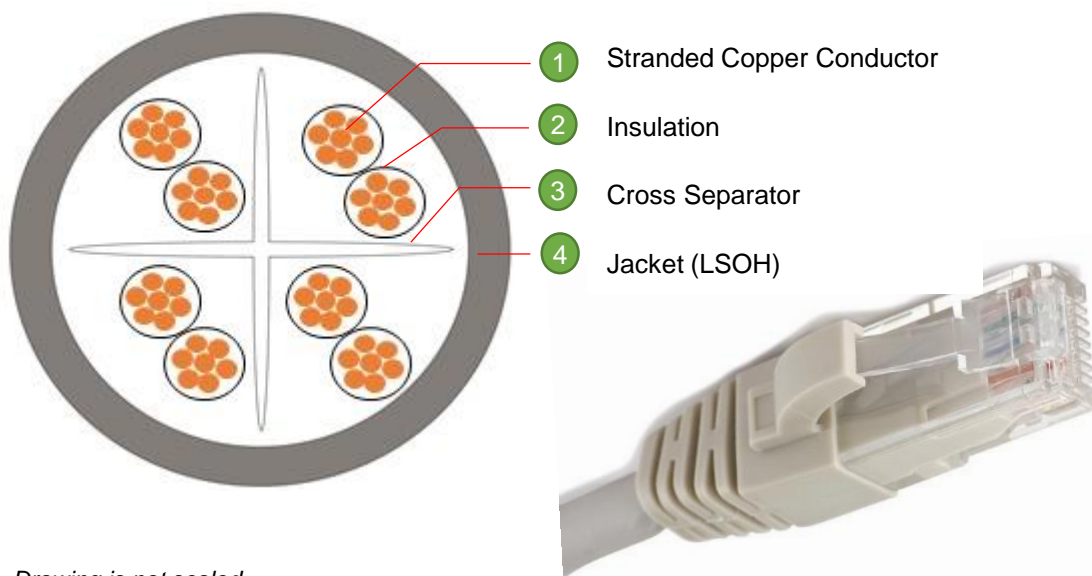
- Exceeds requirements of ANSI/TIA/EIA-568-2.D, EN 50173, ISO/IEC 11801-1:2017, IEC 61935-2 and IEC 60512-99-001 Category 6 balanced cord requirements
- Supports PoE and PoE+ applications
- Error free performance up to 250 Mhz. at 1 Gigabit Ethernet
- Offered with different jacket colours
- Certificated by Delta(Force Technology) and Intertek(ETL)

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

Conductor	Material Type	100% Bare Annealed Copper	
	Size	24 AWG	
	Colour	Blue x Blue/White Stripe	
		Orange x Orange/White Stripe	
		Green x Green/White Stripe	
		Brown x Brown/White Stripe	
Insulation	PE		
Insulation Diameter	1,00 ± 0,05 mm.		
Central Member	Type	Cross Separator	
	Material	PE	
Jacket	Material Type	LSOH (Low Smoke Zero Halogen)	
	Outer Diameter	6,00 ± 0,2mm.	
RJ-45 Plug	Material Type	8P8C 50µ" 94V-2 (C6RH5Z50V2IL)	
	Contact Surface	Phosphorous Bronze, 50µ" Gold Plated Over 140µ" Nickel Undercoat	
	Installation	TIA 568 A/B	



Drawing is not scaled.



COMPLIANCE

Standards For Generic Cabling And Cabling Components - Category 6 Balanced Cord Requirements
• ISO/IEC 11801-1:2017 (V.1.0)
• ISO/IEC 11801-2:2017 (V.1.0)
• EN 50173-1:2018
• EN 50173-2:2018
• ANSI/TIA/EIA 568-2.D:2018
• IEC 61935-2:2010 (V.3.0) (transmission requirements)
• IEC 60512-99-001 (V1.0) (plug)
Standards For The Restriction Of Use Of Hazardous Substances In Electrical And Electronic Equipments
• 2011/65/EU (RoHS-2)
Certification
• Certificated by Delta(Force Technology) and Intertek(ETL)

TRANSMISSION PERFORMANCE

FREQUENCY (Mhz.)	INSERTION LOSS (dB., max.)	RETURN LOSS (dB., min.)	NEXT (dB., min.)	PSNEXT (dB., min.)	ELFEXT (dB., min.)	PS ELFEXT (dB., min.)
1	2,0	20,0	74,3	72,3	67,8	64,8
4	3,8	23,0	65,3	63,3	55,8	52,8
8	5,5	24,5	60,8	58,8	49,7	46,7
10	6,0	25,0	59,3	57,3	47,8	44,8
16	7,7	25,0	46,2	54,2	43,7	40,7
20	8,4	25,0	54,8	52,8	41,8	38,8
25	9,5	24,2	53,3	51,3	39,8	36,8
31,25	10,7	23,3	51,9	49,9	37,9	34,9
62,5	15,7	20,7	47,4	45,4	31,9	28,9
100	19,6	19,0	44,3	42,3	27,8	24,8
200	28,7	16,4	39,8	37,8	21,8	18,8
250	32,0	15,6	38,3	36,3	19,8	16,8

Typical performance data for 2m. cord tested according to IEC 61935-2 at 20°C. Actual performance may vary depending on installation and environmental conditions.

ENVIRONMENTAL AND PHYSICAL SPECIFICATIONS

Transportation & Storage Temperature	-25 / +70	°C
Installation Temperature	-20 / +60	°C
Operation Temperature	-20 / +60	°C
Relative Humidity	10 - 90, Non-condensing	%

ELECTRICAL SPECIFICATIONS

Conductor Resistance (@20 °C)	5	Ω., Max.
Contact Resistance	20	mΩ., Max.
Dc Resistance Unbalance	2	%, Max.
Characteristic Impedance @1-250 Mhz.	100±6	Ω.
Current Rating	1,0	A., Max.
Dielectric Withstanding Voltage	75	VAC.,Max.
Dielectric Strength	1	kVAC,Max.
DC Impedance	72	Ω/km.,Max.
Insulation Resistance (@500VDC)	5.000	MΩ,Min.

MECHANICAL SPECIFICATIONS

Durability	1.200	
Pulling Tension Strength	10 (1Kgf.)	N./mm ² , Max.
Cable to Plug Pulling Tension Strength	90 (9Kgf.)	N./mm ² , Max.
Bending Radius(Installation/Operation)	8 / 4 x O.D.	mm.

PART NUMBER CODING

Part Nr.	Product Description													
T221ZXY	Zemecs Category 6 UTP 24# LSOH Patch Cord													
X: Jacket Colour										Y: Length				
1	Light Grey	4	Red	7	Yellow	S2	0,20m.	1	2m.	5	7m.			
2	Black	5	Green	8	Orange	S	0,25m.	2	3m.	M	10m.			
3	White	6	Blue	9	Violet	0	0,50m.	3	4m.	L	15m.			

