



## OVERVIEW

Zemecs T231 series Category 6A UTP LSOH patch cords are designed and manufactured to exceed performances specified by ANSI/TIA 568-2.D, EN 50173 and ISO/IEC 11801 standards up to 500Mhz. The products are constructed by terminating overall foiled 4 pairs of stranded conductors under LSOH sheath with 50µ" gold plated UTP RJ-45 plugs at both ends.

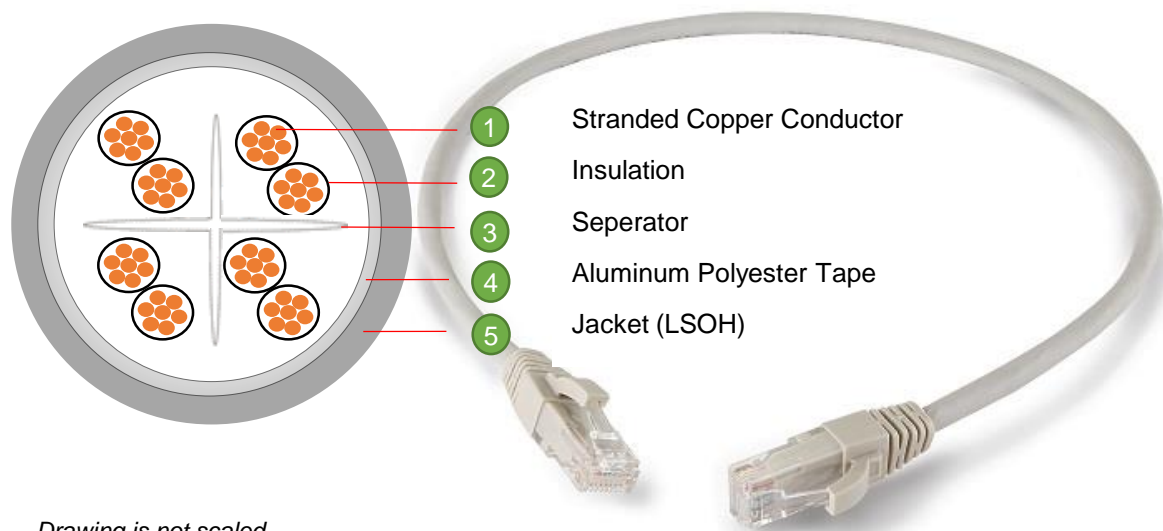
The cords offered under 9 different jacket colours and lengths starting from 0,20m. are covered within Zemecs' 25 year system performance warranty programme.

## 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<sub>A</sub> balanced cord requirements
- Supports PoE and PoE+ applications
- Error free performance up to 500 Mhz. at 10 Gigabit Ethernet
- Offered with different jacket colours
- Certificated by Intertek(ETL)

## APPLICATIONS

- 10G Base-T 10 Gigabit Ethernet
- 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



Drawing is not scaled.

## MATERIAL AND PHYSICAL SPECIFICATIONS

<b>Conductor</b>	Material Type	100% Bare Annealed Copper
	Size	26 AWG
	Colour	Blue x Blue/White Strip
		Orange x Orange/White Strip
		Green x Green/White Strip
	Insulation	PE
Insulation Diameter	0,90 ± 0,05 mm.	
<b>Jacket</b>	Material Type	LSOH (Low Smoke Zero Halogen)
	Outer Diameter	6,10 ± 0,2mm.
<b>RJ-45 Plug</b>	Material Type	8P8C 50µ" 94V-2 (C6RH5Z50V2IL)
	Contact Surface	Phosphorus Bronze, 50 µ" Gold Plate over 140 µ" Nickel Undercoat
	Installation	TIA 568 A/B



## COMPLIANCE

### Standards For Generic Cabling And Cabling Components - Category 6<sub>A</sub> 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 Intertek(ETL)

## TRANSMISSION PERFORMANCE

FREQUENCY (Mhz.)	RETURN LOSS (dB., min.)	NEXT (dB., min.)	PSNEXT (dB., min.)	ACRF (dB., min.)	PS ACRF (dB., min.)
1	20,0	74,3	72,3	67,8	64,8
4	23,0	65,3	63,3	55,8	52,8
8	24,5	60,8	58,8	49,7	46,7
10	25,0	59,3	57,3	47,8	44,8
16	25,0	56,2	54,2	43,7	40,7
20	25,0	54,8	52,8	41,8	38,8
25	24,3	53,3	51,3	39,8	36,8
31,25	23,6	51,9	49,9	37,9	34,9
62,5	21,5	47,4	45,4	31,9	28,9
100	20,1	44,3	42,3	27,8	24,8
200	16,4	39,8	37,8	21,8	18,8
250	15,6	38,3	36,3	19,8	16,8
500	15,2	33,8	31,8	13,8	10,8

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 <sup>2</sup> , Max.
Cable to Plug Pulling Tension Strength	90 (9Kgf.)	N./mm <sup>2</sup> , Max.
Bending Radius(Installation/Operation)	8 / 4 x O.D.	mm.

## PART NUMBER CODING

Part Nr.	Product Description
T231ZXY	Zemecs Category 6 <sub>A</sub> UTP 26# LSOH Patch Cord

X: Jacket Colour					
1	Light Grey	4	Red	7	Yellow
2	Black	5	Green	8	Orange
3	White	6	Blue	9	Violet

Y: Length					
S2	0,20m.	1	2m.	5	5m.
S	0,25m.	2	3m.	M	10m.
0	0,50m.	3	4m.	L	15m.

