



OVERVIEW

Zemecs T145Z series Category 7 S/FTP LSOH 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 50288-9-1 standards up to 600 Mhz. Four twisted pairs of 23 AWG solid copper conductors are foiled individually which are then braided by tinned copper or aluminum manganese. Products with LSOH jacket are delivered in packages of 305, 500 and 1.000m. reels.

Zemecs Category 7 S/FTP LAN cables support network speeds up to 10 Gigabit/s. They are third party verified on component level and covered within Zemecs' 25 year system performance guarantee programme.



FEATURES

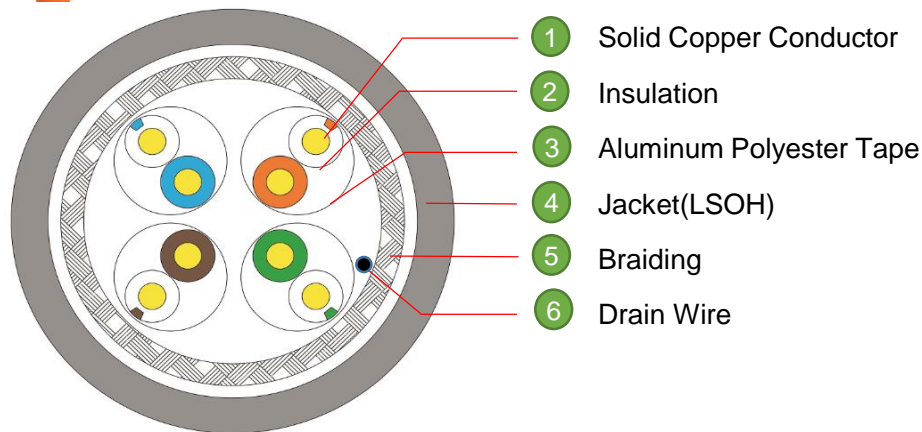
- Exceeds requirements of ANSI/TIA/EIA-568-2.D, EN 50173, ISO/IEC 11801, IEC 61156-5 and EN 50288-4-1 cabling standards for channels, links and components
- Supports PoE and PoE+ applications
- Error free performance upto 600 Mhz. at 10 Gigabit Ethernet
- High ACR values increasing signal quality and network connection speed
- Guaranteed stable performance at all frequencies thanks to aluminum foil reducing impact of EMI
- Offered with different jacket colour and packages
- 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

MATERIAL AND PHYSICAL SPECIFICATIONS

Conductor	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	1,35 ± 0,05 mm.
Pair Insulation	Aluminum Polyester Tape	
Braid	Tinned Copper Or Aluminum Manganese, Min. 40%	
Jacket	Material	LSOH (Low Smoke Zero Halogen)
	Outer Diameter	7,40 ± 0,15 mm.
Drain Wire	Material	0,45mm. Tinned Annealed Copper





COMPLIANCE

Generic Cabling And Cabling Components Standards - Category 7 Requirements	
• ISO/IEC 11801-1:2017 (V.1.0) , ISO/IEC 11801-2:2017 (V.1.0)	
• IEC 61156-5:2012 (V.2.1)	
• EN 50173-1:2018	
• EN 50173-2:2018	
• EN 50288-4-1:2013	
• ANSI/TIA-568-2.D:2018	
Flammability, Halogen Acidity And Smoke Performance	
• IEC 60332-1-1:2015 (V.1.1), IEC 60332-1-2:2015 (V.1.1)	
• IEC 60754-1:2011 (V.3.0), IEC 60754-2:2011 (V.2.0)	
• IEC 61034-1:2013 (V.3.1), IEC 61034-2:2013 (V.3.1)	
• EN 50575: 2014 + A1: 2016, EN 50399:2011+A1:2016	
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.)	INSERTION LOSS (dB., max)	RETURN LOSS (dB., min.)	NEXT (dB., min.)	PSNEXT (dB., min.)	ACR-F (dB., min.)	PS ACR-F (dB., min.)
1	1,9	20,0	77,8	74,8	70,9	69,9
4	3,7	23,0	77,8	74,8	61,7	61,7
8	4,9	24,1	77,8	74,8	57,0	56,0
10	5,8	25,0	77,8	74,8	54,7	54,0
16	7,4	25,0	77,7	74,7	51,1	50,1
20	8,2	25,0	77,7	74,7	50,1	48,9
25	9,3	24,3	77,7	74,7	48,3	47,1
31,25	10,3	24,3	24,0	74,7	48,0	46,8
62,5	14,9	21,6	75,2	72,2	51,5	49,3
100	18,8	21,6	72,1	69,1	36,2	36,1
200	26,9	18,1	68,8	65,8	36,2	35,2
250	30,7	17,4	64,6	61,6	26,2	26,1
500	45,0	17,4	61,6	58,6	18,8	18,8
600	50,1	17,4	60,5	57,5	16,4	16,2

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.

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	60	N./mm. ² , 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
T145ZMXY	Zemecs Category 7 S/FTP 4x2x23# LSOH Solid LAN Cable

M: Jacket Colour					
1	Light Grey	4	Red	7	Yellow
2	Black	5	Green	8	Orange
3	White	6	Blue	9	Violet
X: Length					
1	305m.	2	500m.	3	1.000m.
Y: Package Type					
R	Reel				

