

NOVACORD

FUTP-4P-C5E-A24S-LSZH-GR



Oxygen Free Copper
99,9%



Overall
Shielded



Provide 100MHz
bandwidth in 100m



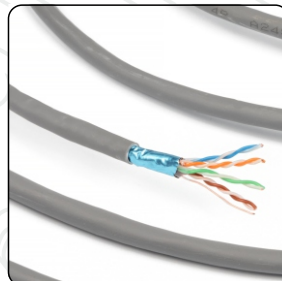
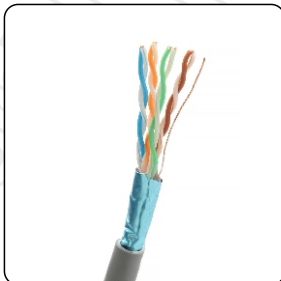
For Indoor
use



A Category 5e twisted pair cable, also known as a LAN or Ethernet data cable is a copper wire cable twisted into several pairs and coated, which can support data transfer speeds of up to 1 gigabit (1000 megabits). This higher bandwidth enables fast transfer of large files on the network.

- Provide 100MHz bandwidth in 100m, typical speed rate: 1000Mbps
- Widely used for horizontal cabling in working area and LAN indoor, meets or exceeds Cat.5e standard
- High grade OFC (oxygen free copper) conductor, reliable electric transmission
- Comparing with normal PVC sheath, LSZH emits lower smoke when burnt (according to IEC 61034) and chloric acid <2mg/g (according to IEC 60754), decreasing smoke density and hazards for escape and rescue, eco-friendly product

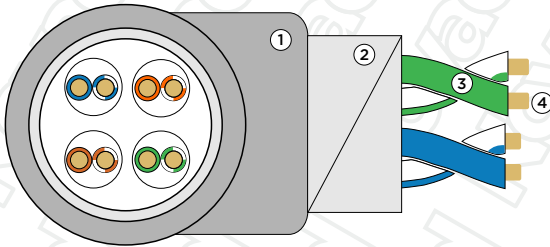
Pictures:



HIGHEST QUALITY - RELIABILITY - INNOVATION

Novacord

Cat. 5e F/UTP AWG24/1 installation cable, 4 pairs, FRNC/LSZH, EN 50173-1



- 1 - Jacket
- 2 - Screen
- 3 - Insulation
- 4 - Conductor

Structure

Conductor	Cross Sec. Area	0.20 mm ² , Ø 0.50 mm
	No. of Cores	1 cores
	Material	OFC
	Type of conductor	Solid
	Strands	1/0.505 mm
Insulation	Material	PE
	Diameter	0.97 ±0.1 mm
	Colors	Orange, White/Orange, Green, White/Green, Blue, White/Blue, Brown, White/Brown,
Twisting		2 cores twisted to the pair
Cable lay up		4 pairs to the core
Outer Screen	Material	Aluminum Foil
	Jacket	Material
	Diameter	6.5 ±0.2 mm
	Color	Grey

Mechanical properties

Bending radius	without load	26 mm / 4xD (outer diameter)
	with load	52 mm / 8xD (outer diameter)
Temperature range		-20°C to +60°C
Tensile force		100 N

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Electrical properties

at 20 °C

DC loop resistance	≤ 190 Ω/km
Resistance unbalance	≤ 2%
Capacitance at 800 Hz	Nom. 48 nF/km
Capacitance unbalance (pair to ground)	≤ 1500 pF/km
Insulation resistance (500V)	≥ 2000 MΩ/km
Mean impedance 100 Mhz	100±5Ω
Nominal velocity of propagation	Approx. 67 %
Propagation delay	Nominal 535 ns/100m
Delay skew	Nominal 20 ns/100m
Coupling attenuation	≥ 55 dB

Transmission characteristics acc. to Category 5e

at 20 °C

F	Attenuation	Next	PS-NEXT	ASR	PS-ASR	ACRF	PS-ACRF	Return Loss
(MHZ)	(dB/100m)	(dB)	(dB)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB)
1	1.9	71	68	69.1	66.1	68	65	20
4	3.7	62	59	58.3	55.3	56	53	23
10	6	56	53	50	47.0	48	45	25
16	7.6	53	50	45.4	42.4	44	41	25
20	8.5	51	48	42.5	39.5	42	39	25
31.2	10.7	49	46	38.3	35.3	38	35	24
62.5	15.7	44	41	28.3	25.3	32	29	22
100	19.8	41	40	21.2	18.2	28	25	20
125	22.3	40	38	17.7	14.7	26	23	19
155.5	24.2	38	37	13.8	10.8	24	21	
175	25.7	37	35	11.3	8.3	23	20	
200	27.5	36	34	8.5	5.5	22	19	
250	29.2	35	33	5.8	2.8	20	17	
300	32.0	34	31	2.0	-1.0	16	13	

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Application

IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T;

IEEE 802.5 16 MB; ISDN; TPDDI; ATM

Power over Ethernet (PoE) / PoE+

Tertiary (Horizontal)

Standarts

EIA/TIA-568-C.2

ISO/IEC 11801.

IEC 61156-6

EN 50173-1

EN 50288-6-1

IEEE 802.3at

Flame resistance

IEC 60332-1

IEC 60754-2

IEC 61034

IEC 60332-3-24

Class Eca

Technical data

Article	Delivery length	Box size	Weight
305B	305 m	400/400/250	12.5 kg

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Cable ID: C5E 4P A24S LS GR

Test Summary: PASS

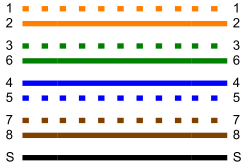
Date / Time: 04/25/2023 08:31:24am
 Headroom: **16.2 dB (NEXT 12-78)**
 Test Limit: TIA Cat 5e Channel
 Cable Type: Cat 5 F/UTP

Operator: ZH LIANG HUI
 Software Version: 2.7800
 Limits Version: 1.9500
 NVP: 69.0%

Model: DTX-1800
 Main S/N: 2314069
 Remote S/N: 2314070
 Main Adapter: DTX-CHA002
 Remote Adapter: DTX-CHA002

Wire Map (T568B)

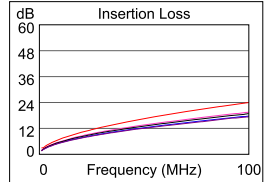
PASS



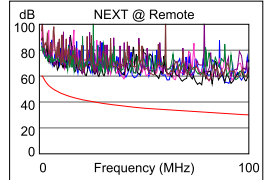
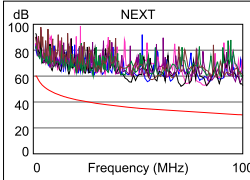
329 ft



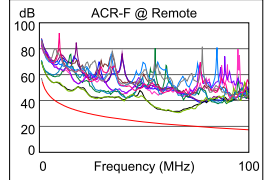
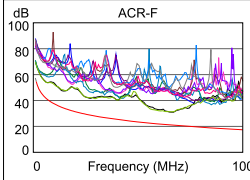
Length (ft), Limit 328	[Pair 78]	329
Prop. Delay (ns), Limit 555		513
Delay Skew (ns), Limit 50		28
Resistance (ohms)	[Pair 36]	14.6
Insertion Loss Margin (dB)	[Pair 36]	4.5
Frequency (MHz)	[Pair 36]	100.0
Limit (dB)	[Pair 36]	24.0



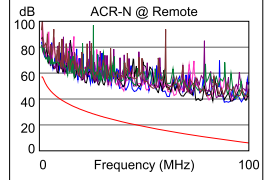
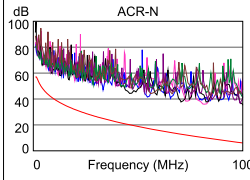
Worst Case Margin	Worst Case Value	
	MAIN	SR
PASS	12-78	12-78
Worst Pair	12-78	12-78
NEXT (dB)	16.2	16.4
Freq. (MHz)	8.9	8.8
Limit (dB)	47.9	48.0
Worst Pair	36	36
PS NEXT (dB)	16.4	17.0
Freq. (MHz)	4.1	3.1
Limit (dB)	50.3	52.3



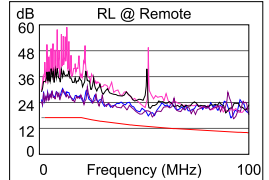
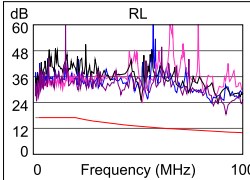
Worst Case Margin	Worst Case Value	
	MAIN	SR
PASS	78-12	78-12
Worst Pair	78-12	78-12
ACR-F (dB)	9.8	9.6
Freq. (MHz)	63.0	65.3
Limit (dB)	21.4	21.1
Worst Pair	12	12
PS ACR-F (dB)	12.6	12.7
Freq. (MHz)	63.0	64.8
Limit (dB)	18.4	18.2



Worst Case Margin	Worst Case Value	
	MAIN	SR
N/A	12-78	12-78
Worst Pair	12-78	12-36
ACR-N (dB)	18.0	18.2
Freq. (MHz)	8.9	8.8
Limit (dB)	41.2	41.3
Worst Pair	36	36
PS ACR-N (dB)	17.2	17.7
Freq. (MHz)	4.1	3.1
Limit (dB)	45.8	48.4



Worst Case Margin	Worst Case Value	
	MAIN	SR
PASS	78	78
Worst Pair	78	78
RL (dB)	8.2	4.6
Freq. (MHz)	92.0	51.8
Limit (dB)	10.4	12.9



Compliant Network Standards:
 10BASE-T 100BASE-TX 100BASE-T4
 1000BASE-T ATM-25 ATM-51
 ATM-155 100VG-AnyLAN TR-4
 TR-16 Active TR-16 Passive