

NOVACORD

UUTP-4P-C6-A23S-LSZH-OR



Oxygen Free Copper
99,9%



Flexible
construction



Provide 250MHz
bandwidth in 100m



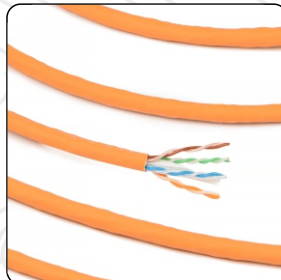
For Indoor
use



A Category 6 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 250MHz bandwidth in 100m, typical speed rate: 1000Mbps
- Widely used for horizontal cabling in working area and LAN indoor
- High grade OFC (oxygen free copper) conductor, 4pairs separately design by crossed PE spline, reliable transmission performance, meets or exceeds standard, provide plentiful redundancy for system link, fast and convenient installation

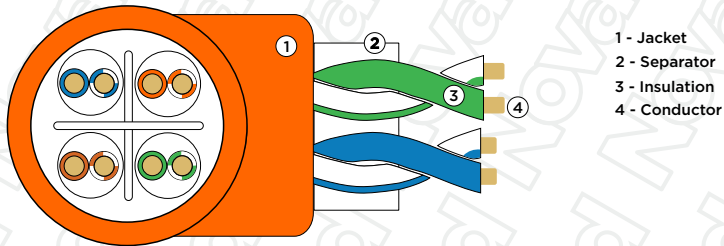
Pictures:



HIGHEST QUALITY - RELIABILITY - INNOVATION

Novacord

Cat. 6 U/UTP AWG23/1 installation cable, 4 pairs, FR-LSZH, EN 50173-1



Structure

Conductor	Cross Sec. Area	0.26 mm ² , Ø 0.56 mm
	No. of Cores	1 cores
	Material	OFC
	Type of conductor	Solid
	Strands	1/0.57 mm
Insulation	Material	PE
	Diameter	1.02 ±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
Separator		non metallic cross separator (spline)
Jacket	Material	FRNC/LSZH,
	Diameter	6.2 ±0.2 mm
	Color	Orange

Mechanical properties

Bending radius	without load	25 mm / 4xD (outer diameter)
	with load	50 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	154 Ω/km
Resistance unbalance	≤ 2%
Capacitance at 800 Hz	Nom. 48 nF/km
Capacitance unbalance (pair to ground)	≤ 1500 pF/km
Insulation resistance (500V)	≥ 5000 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	≥ 40 dB

Transmission characteristics acc. to Category 6

at 20 °C

F (MHZ)	Attenuation (dB/100m)		Next (dB)		PS-NEXT (dB)		ASR (dB/100m)		PS-ASR (dB/100m)		ACRF (dB/100m)		PS-ACRF (dB/100m)		Return Loss (dB)
	max.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.
1	2.1	1.9	74	78	72	75	72.0	76.1	70.0	73.1	68	82	65	80	20
4	3.8	3.8	65	69	63	66	61.2	65.2	59.2	62.2	56	70	53	68	23
10	6.0	6.0	59	63	57	60	53.0	57.0	51.0	54.0	48	62	45	60	25
16	7.6	7.6	56	60	54	57	48.4	52.3	46.4	49.3	44	58	41	56	25
20	8.5	8.5	55	59	53	56	46.5	50.0	44.5	47.0	42	56	39	54	25
31.2	10.7	10.7	52	56	50	53	41.3	45.0	39.3	42.0	38	52	35	50	23.6
62.5	15.5	15.1	47	51	45	48	31.5	36.0	29.5	33.0	32	46	29	44	21.5
100	19.9	19.1	44	48	42	45	24.1	28.9	22.1	25.9	28	42	25	40	20.1
125	22.5	21.3	43	47	41	44	20.5	25.2	18.5	22.2	26	40	23	38	19.5
155.5	25.4	23.8	42	45	40	42	16.6	21.3	14.6	18.3	24	38	21	36	18.8
175	27.1	25.3	41	44	39	41	13.9	19.1	11.9	16.1	23	37	20	35	18.4
200	29.2	27.0	40	44	38	41	10.8	16.5	8.8	13.5	22	36	19	34	18.0
250	33.0	32.0	38	42	36	39	5.0	10.0	2.0	7.0	20	34	17	32	17.3
300		36.1		41		38		4.8		1.8		32		30	
400		41.7		39		36		-2.7		-5.7		30		28	

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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 61156-5

EN 50173-1

EN 50288-6-1

IEEE 802.3at

Flame resistance

IEC 60332-1

IEC 60332-3-24

IEC 60754-2

IEC 61034

Class Eca

Amt of Halogen

zero

Technical data

Article	Delivery length	Box size	Weight
305B	305 m	400/400/250	15 kg

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Cable ID: 1231FD-UTP41

Test Summary: PASS

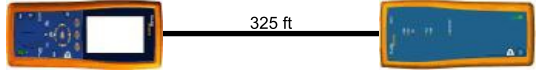
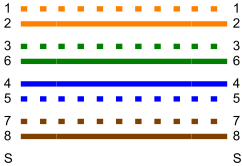
Date / Time: 02/18/2023 04:44:34pm
Headroom: 8.1 dB (NEXT 12-36)
Test Limit: TIA Cat 6A Channel
 Cable Type: Cat 6 U/UTP NOVACORD

Operator: Gotthilf Gehrig
 Software Version: 2.7800
 Limits Version: 1.9500
 NVP: 68.2%

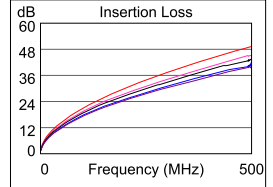
Model: DTX-1800
 Main S/N: 2314069
 Remote S/N: 2314070
 Main Adapter: DTX-CHA002
 Remote Adapter: DTX-CHA002

Wire Map (T568B)

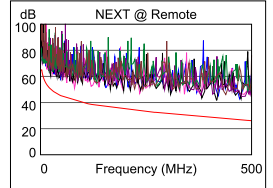
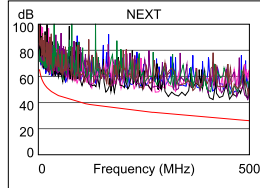
PASS



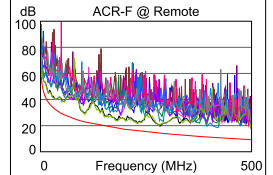
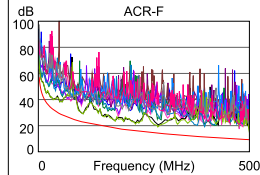
Length (ft), Limit 328	[Pair 78]	325
Prop. Delay (ns), Limit 555		513
Delay Skew (ns), Limit 50		28
Resistance (ohms)	[Pair 36]	14.5
Insertion Loss Margin (dB)	[Pair 36]	4.2
Frequency (MHz)	[Pair 36]	500.0
Limit (dB)	[Pair 36]	49.3



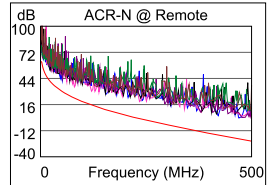
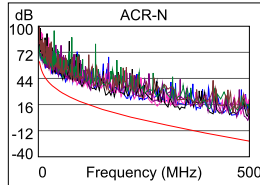
	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	12-36	36-45	12-78	12-78
NEXT (dB)	8.1	8.7	12.1	13.6
Freq. (MHz)	3.1	5.0	432.0	417.0
Limit (dB)	64.8	61.5	27.8	28.2
Worst Pair	36	36	12	12
PS NEXT (dB)	6.9	7.8	14.5	16.0
Freq. (MHz)	3.1	5.0	432.0	472.0
Limit (dB)	62.0	59.0	24.9	23.9



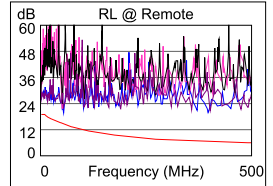
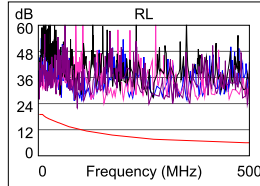
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	78-12	78-12	12-45	45-36
ACR-F (dB)	4.6	5.1	7.7	5.5
Freq. (MHz)	284.0	183.0	476.0	379.0
Limit (dB)	14.2	18.0	9.7	11.7
Worst Pair	12	78	45	12
PS ACR-F (dB)	7.6	7.5	9.5	9.4
Freq. (MHz)	284.0	284.0	476.0	476.0
Limit (dB)	11.2	11.2	6.7	6.7



	MAIN	SR	MAIN	SR
N/A				
Worst Pair	12-36	36-45	36-45	12-36
ACR-N (dB)	8.6	9.3	22.0	20.0
Freq. (MHz)	3.1	5.0	496.0	472.0
Limit (dB)	61.1	56.9	-22.9	-21.0
Worst Pair	36	36	36	36
PS ACR-N (dB)	7.4	8.4	22.6	21.7
Freq. (MHz)	3.1	5.0	496.0	480.0
Limit (dB)	58.3	54.3	-25.8	-24.5



	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36	12	78	12
RL (dB)	8.5	5.1	9.5	13.6
Freq. (MHz)	51.5	54.8	92.3	398.0
Limit (dB)	14.9	14.6	12.4	6.0



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