

# U/UTP Unshielded CAT.6 INTERIOR 23AWG Twisted Pair Installation Cable



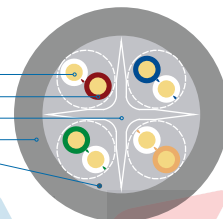
## Application

- Meets or exceeds requirements of ANSI/TIA-568-C.2 Category 6 and ISO 11801 2nd Edition Class E channel standards.
- Meets or exceeds requirements of ANSI/TIA-568-C.2 and IEC 61156-5 Category 6 component standards.
- Meets requirements of IEEE 802.3af and IEEE 802.3at for PoE applications.
- Third party tested to comply with ANSI/TIA/EIA-568-C.2.
- Descending length cable markings enable easy identification of remaining cable which reduces installation time and cable scrap.
- Color Availability: Additional cable colors available.

## Electrical Characteristics

- Bandwidth: 250 MHz
- Transmission Speed: 1Gbps
- Jacket: PVC
- Impedance: 1-250MHz 100±15(Ohms).
- Rated Temperature: 75°C.
- DC Resistance Unbalance(%): Max 2.5.
- DC Resistance 20°C: 8.4(Ohms/100m).
- Pair-to-Ground Capacitance Unbalance: 330(pF/100M).
- Insulation Resistance: >5000MΩ\*Km.
- Dielectric strength: DC 2500V 2S.

Conductor  
HDPE Insulation  
Cross Filler  
Jacket  
Rip Cord



## Conductor

Conductor	Solid Bare Copper 23AWG
Insulation	HDPE
Total number of insulated conductors	8, twisted in 4 pairs
Color code	White-Blue/Blue, White-Orange/Orange White-Green/Green, White-Brown/Brown
Individual pair shield	None
Overall shield	None
Drain wire	None

## Order information

Item	Outer Jacket	Overall diameter(mm)
D165-P	CMX	6.4±0.2
D165-C	CM	6.4±0.2
D165-R	CMR	6.4±0.2
D165-L	LSZH	6.4±0.2
D165-E	LDPE	6.4±0.2

## Nominal Transmission Characteristics

Frequency (MHz)	RL (min) (dB)	IL(max) (dB/100m)	DOP(max) (ns/100m)	Delay Skew (max) (ns/100m)	NEXT (min) (dB)	PSNEXT (min) (dB)	ACR-F (min) (dB/100m)	PSACR-F (min) (dB/100m)
1	20.0	2	570	45	74	72	67.8	64.8
4	23.0	3.8	552	45	65	63	55.7	52.7
10	25.0	6.0	545	45	59	57	47.8	44.8
16	25.0	7.6	543	45	56	54	43.7	40.7
20	25.0	8.5	542	45	55	53	41.7	38.7
31.25	23.6	10.7	540	45	52	50	37.9	34.9
62.5	21.5	15.4	538	45	47	45	31.8	28.8
100	20.1	19.8	537	45	44.3	42.3	27.8	24.8
200	18.0	29.0	536	45	39.7	37.7	21.7	18.7
250	17.3	32.8	535	45	38	36	19.8	16.8

Note: The above transmission performance for the 100M, 20 ± 2°C under the conditions tested.

# TEST REPORT



## Cable ID: U/UTPCAT6MWA

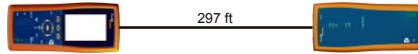
Date / Time: 04/01/2020 08:53:51 AM  
 Headroom 6.0 dB (NEXT 45-78)  
 Test Limit: TIA Cat 6 Perm. Link  
 Cable Type: Cat 6 U/UTP  
 NVP: 69.0%

Operator: Your Name  
 Software Version: 2.7800  
 Limits Version: 1.9500  
 Calibration Date:  
 Main (Tester): 04/01/2020  
 Remote (Tester): 04/01/2020

## Test Summary: PASS

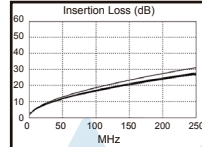
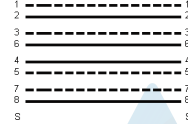
Model: DSX-5000  
 Main S/N: 9391107  
 Remote S/N: 9391108  
 Main Adapter: DSX-PLA002  
 Remote Adapter: DSX-PLA002

Length (ft), Limit 295	[Pair 78]	297
Prop. Delay (ns), Limit 498	[Pair 45]	463
Delay Skew (ns), Limit 44	[Pair 45]	26
Resistance (ohms)	[Pair 45]	13.7
Insertion Loss Margin (dB)	[Pair 36]	3.1
Frequency (MHz)	[Pair 36]	246.0
Limit (dB)	[Pair 36]	30.8



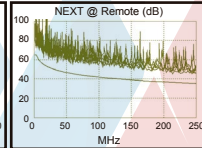
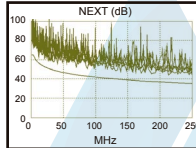
### Wire Map (T568B)

PASS

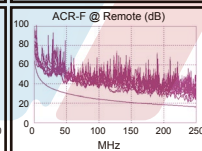
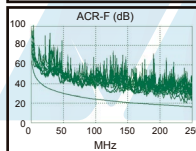


### Worst Case Margin Worst Case Value

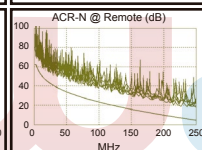
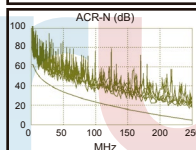
PASS	MAIN	SR	MAIN	SR
Worst Pair	45-78	12-45	36-78	12-45
<b>NEXT (dB)</b>	6.0	8.6	8.0	8.6
Freq. (MHz)	11.9	214.0	238.5	214.0
Limit (dB)	56.7	36.4	35.7	36.4
Worst Pair	78	45	36	45
<b>PS NEXT (dB)</b>	6.6	8.4	7.9	8.4
Freq. (MHz)	11.9	214.0	245.0	214.0
Limit (dB)	54.3	33.8	32.9	33.8



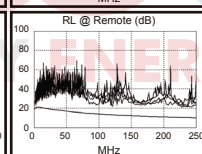
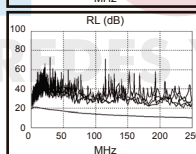
PASS	MAIN	SR	MAIN	SR
Worst Pair	12-36	36-12	12-36	36-12
<b>ACR-F (dB)</b>	3.4	4.7	3.4	4.7
Freq. (MHz)	241.0	237.5	241.0	241.0
Limit (dB)	16.5	16.7	16.5	16.5
Worst Pair	36	12	36	12
<b>PS ACR-F (dB)</b>	6.1	6.1	6.1	6.1
Freq. (MHz)	241.0	241.0	241.0	241.0
Limit (dB)	13.5	13.5	13.5	13.5



N/A	MAIN	SR	MAIN	SR
Worst Pair	45-78	45-78	12-36	12-45
<b>ACR-N (dB)</b>	6.5	9.3	11.6	13.5
Freq. (MHz)	11.9	2.6	245.0	250.0
Limit (dB)	50.6	62.0	4.7	4.2
Worst Pair	78	45	36	45
<b>PS ACR-N (dB)</b>	7.1	9.4	11.2	12.7
Freq. (MHz)	11.9	14.4	245.0	241.0
Limit (dB)	48.2	46.3	2.1	2.5



PASS	MAIN	SR	MAIN	SR
Worst Pair	12	12	78	78
<b>RL (dB)</b>	4.7	6.7	10.3	10.3
Freq. (MHz)	3.6	3.6	236.5	229.0
Limit (dB)	21.0	21.0	10.3	10.4



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

FLUKE networks.

