

U/UTP Unshielded CAT.6 Flexible - Multiwire Twisted Pair Installation Cable



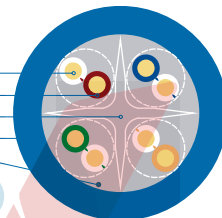
Application

- 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: 250MHz
- Transmission Speed: 1Gbps
- Armor: No
- Jacket: Flex
- 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	Copper 7,20mm
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	RL (min)	IL(max)	DOP(max)	Delay Skew (max)	NEXT (min)	PSNEXT (min)	ACR-F (min)	PSACR-F (min)
(MHz)	(dB)	(dB/100m)	(ns/100m)	(ns/100m)	(dB)	(dB)	(dB/100m)	(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/UTP CAT.6 MWA

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 - 7- 0,20mm
 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

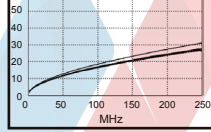


297 ft

Wire Map (T568B)
PASS

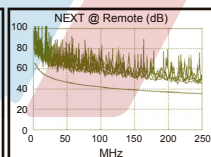
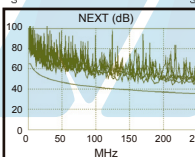


Insertion Loss (dB)

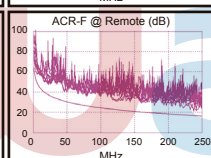
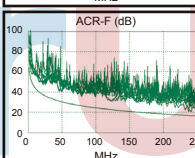


Worst Case Margin Worst Case Value

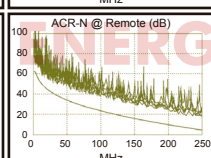
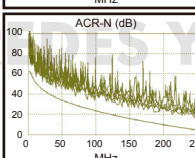
PASS	MAIN	SR	MAIN	SR
Worst Pair	45-78	12-45	36-78	12-45
NEXT (dB)	6.0	8.6	8.0	8.6
Freq. (MHz)	11.9	214.0	238.5	214.0
Limit (dB)	56.7	36.4	35.7	36.4
Worst Pair	78	45	36	45
PS NEXT (dB)	6.6	8.4	7.9	8.4
Freq. (MHz)	11.9	214.0	245.0	214.0
Limit (dB)	54.3	33.8	32.9	33.8



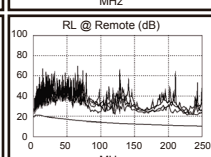
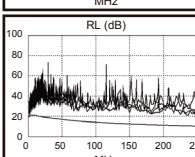
PASS	MAIN	SR	MAIN	SR
Worst Pair	12-36	36-12	12-36	36-12
ACR-F (dB)	3.4	4.7	3.4	4.7
Freq. (MHz)	241.0	237.5	241.0	241.0
Limit (dB)	16.5	16.7	16.5	16.5
Worst Pair	36	12	36	12
PS ACR-F (dB)	6.1	6.1	6.1	6.1
Freq. (MHz)	241.0	241.0	241.0	241.0
Limit (dB)	13.5	13.5	13.5	13.5



N/A	MAIN	SR	MAIN	SR
Worst Pair	45-78	45-78	12-36	12-45
ACR-N (dB)	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
PS ACR-N (dB)	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
RL (dB)	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-T ATM-25 ATM-51
 ATM-155 100VG-AnyLan TR-4
 TR-16 Active TR-16 Passive

FLUKE networks.

