

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



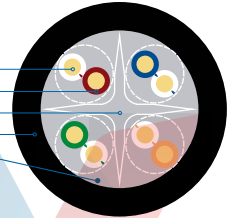
Application

- 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: De outside foil
- 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

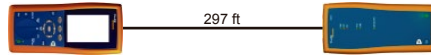
Date / Time: 04/01/2020 08:53:51 AM
 Headroom 6.0 dB (NEXT 45-78)
 Test Limit: TIA Cat 6 Perm. Link
 Cable Type: Cat 6 U/UTP
 NVP: 69.0%

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

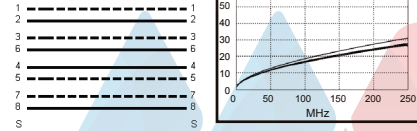
Test Summary: PASS

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

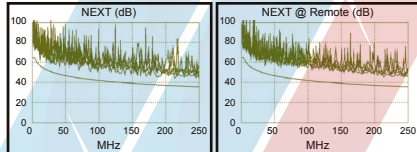
| | | |
|-----------------------------|-----------|-------|
| Length (ft), Limit 295 | [Pair 78] | 297 |
| Prop. Delay (ns), Limit 498 | [Pair 45] | 463 |
| Delay Skew (ns), Limit 44 | [Pair 45] | 26 |
| Resistance (ohms) | [Pair 45] | 13.7 |
| | | |
| Insertion Loss Margin (dB) | [Pair 36] | 3.1 |
|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



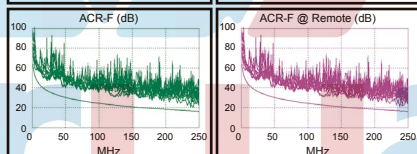
Wire Map (T568B)
PASS



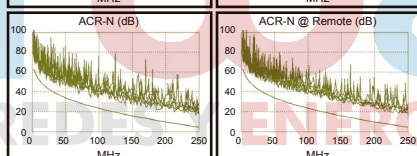
| | Worst Case Margin | | Worst Case Value | |
|---------------------|-------------------|-------|------------------|-------|
| | MAIN | SR | MAIN | SR |
| PASS | | | | |
| Worst Pair | 45-78 | 12-45 | 36-78 | 12-45 |
| NEXT (dB) | 6.0 | 8.6 | 8.0 | 8.6 |
| Freq. (MHz) | 11.9 | 214.0 | 238.5 | 214.0 |
| 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 |



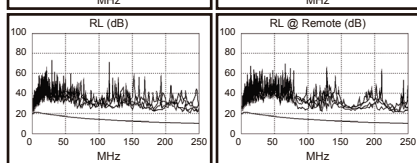
| | MAIN | | SR | |
|----------------------|-------|-------|-------|-------|
| | MAIN | SR | MAIN | SR |
| PASS | | | | |
| Worst Pair | 12-36 | 36-12 | 12-36 | 36-12 |
| ACR-F (dB) | 3.4 | 4.7 | 3.4 | 4.7 |
| Freq. (MHz) | 241.0 | 237.5 | 241.0 | 241.0 |
| Limit (dB) | 16.5 | 16.7 | 16.5 | 16.5 |
|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



| | MAIN | | SR | |
|----------------------|-------|-------|-------|-------|
| | MAIN | SR | MAIN | SR |
| N/A | | | | |
| 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 |



| | MAIN | | SR | |
|----------------|------|------|-------|-------|
| | MAIN | SR | MAIN | SR |
| PASS | | | | |
| 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-T4
 1000BASE-T ATM-25 ATM-51
 ATM-155 100VG-AnyLan TR-4
 TR-16 Active TR-16 Passive

FLUKE networks.

