



Technical Specifications

Product Line: **CEBUS-CM-1N1**

Description

Composite cable consisting of (1) Quad shield CATV/DBS RG6 coaxial cable and (1) UTP Category 5e cables jacketed and run in parallel.

NEC type CM and CEC type CMG FT4. Product manufactured compliant to the requirements of UL444 for installations and applications in accordance with NEC articles 725 and 800.

Component 1:

U/UTP category 5e cable
24 AWG solid annealed bare copper conductor
High density polyethylene
Wall thickness: 0.0085" | 0.216mm
Diameter: 0.037" | 0.94mm
Polyvinyl chloride jacket
Wall thickness: 0.020" | 0.51mm
Diameter: 0.200" | 5.10mm

Electrical

Cat 5e DC resistance: $\leq 28.59 \Omega / 1000'$ | $93.78 \Omega/\text{KM}$
Capacitance: 14.0 pF/FT | 45.9 pF/M
Impedance: $100 \pm 15 \Omega$
Propagation Delay (Skew): 45ns/100m MAX
Voltage rating: 300V
RG6 quad DCR: $6.5 \Omega / 1000'$ | $21.32 \Omega/\text{KM}$
Impedance: 75Ω
Velocity of Propagation: 82%
SRL 5-2200 MHz: -20dB
SRL 2.2-3 GHz: -17dB

Component 2:

RG6 quad shield coaxial cable
18 AWG solid annealed bare copper conductor
Foam polyethylene dielectric
Diameter: 0.180" | 4.57mm
100% APA tape and 60% 34 AWG aluminum braid
100% APA tape and 40% 34 AWG aluminum braid
Polyvinyl chloride jacket
Thickness: 0.030" | 0.76mm
Diameter: 0.295" | 7.50mm

Regulatory

ANSI/TIA-568C Category 5e
NEC: CM 75 °C
CEC: CMG FT4 60 °C
EU RoHS 2002/95/EC Compliant

Color Code

Overall Jacket: Orange
Pair 1: Orange, White/orange stripe
Pair 2: Blue, White/blue stripe
Pair 3: Green, White/green stripe
Pair 4: Brown, White/brown stripe

Packages

Reel: 500' | 152M
Weight: 57 Lbs/1000' | 85 Kg/KM

Assembly

1 coaxial cables and 1 category 6 cable cabled in parallel and joined by a web

Installation

Pull Tension: 130 Lbs | 578 N
Bend radius: 5.12" | 130mm unloaded
Bend radius: 10.24" | 260mm loaded

Construct

N/A

Applications

Smart home systems structured wiring support cable
General purpose CATV/DBS, cable modem
General purpose LAN, voice, and infrared
General purpose BALUN support and media transmission



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Shield

See individual component descriptions

Jacket

Polyvinyl chloride

Colors: Orange

Diameter: 0.295x0.512" | 7.50x13.01mm

Performance

LAN: 300 feet

Passive Baluns up to 2500 feet

CATV to 236 feet

Final Outside Diameter (inches)

0.295x0.512

Specification Revision Date:

July 9, 2010

Category 5e Performance Chart

| FREQ (MHz) | Insertion Loss (dB/100m) | NEXT (dB) | PSNEXT (dB) | ACR (dB/100m) | PSACR (dB/100m) | ELFEXT (dB/100m) | PSELFEXT (dB/100m) | RL (dB) |
|---------------|--------------------------------|--------------|----------------|------------------|--------------------|---------------------|-----------------------|------------|
| | Max. | Min. | Min. | Min. | Min. | Min. | Min. | Min. |
| 0.772 | 1.8 | 67.0 | 64.0 | 65.2 | 62.2 | 66.0 | 63.0 | 19.4 |
| 1.0 | 2.0 | 65.3 | 62.3 | 63.3 | 60.3 | 63.8 | 60.8 | 20.0 |
| 4.0 | 4.1 | 56.3 | 53.3 | 52.2 | 49.2 | 51.7 | 48.7 | 23.0 |
| 8.0 | 5.8 | 51.8 | 48.8 | 46.0 | 43.0 | 45.7 | 42.7 | 24.5 |
| 10.0 | 6.5 | 50.3 | 47.3 | 43.8 | 40.8 | 43.8 | 40.8 | 25.0 |
| 16.0 | 8.2 | 47.3 | 44.4 | 39.1 | 36.2 | 39.7 | 36.7 | 25.0 |
| 20.0 | 9.3 | 45.8 | 42.8 | 36.5 | 33.5 | 37.7 | 34.7 | 25.0 |
| 25.0 | 10.4 | 44.3 | 41.3 | 33.9 | 30.9 | 35.8 | 32.8 | 24.3 |
| 31.25 | 11.7 | 42.9 | 39.9 | 31.2 | 28.2 | 33.9 | 30.9 | 23.6 |
| 62.5 | 17.0 | 36.4 | 35.4 | 19.4 | 18.4 | 27.8 | 24.6 | 21.5 |
| 100.0 | 22.0 | 35.3 | 32.3 | 13.3 | 10.3 | 23.8 | 20.8 | 20.1 |
| 200.0 | 32.4 | 30.8 | 27.8 | -1.6 | -4.6 | 17.8 | 14.8 | 18.0 |
| 300.0 | 41.0 | 28.2 | 25.2 | -12.8 | -15.8 | 14.3 | 11.3 | 16.8 |
| 350.0 | 44.9 | 27.2 | 24.2 | -17.7 | -20.7 | 12.9 | 9.9 | 16.3 |

RG6 Sweep to 3.0 GHz

| Frequency | Attenuation | |
|-----------|-------------|---------|
| | dB/100FT | dB/100m |
| 1 | 0.27 | 0.89 |
| 10 | 0.81 | 2.66 |
| 50 | 1.46 | 4.79 |
| 100 | 2.05 | 6.72 |
| 200 | 2.86 | 9.38 |
| 400 | 4.05 | 13.28 |
| 700 | 5.36 | 17.58 |
| 1000 | 6.59 | 21.62 |
| 1450 | 8.03 | 26.34 |
| 2200 | 9.77 | 32.05 |
| 3000 | 13.11 | 43.00 |