

4731R Coax - 4K Ultra-High-Definition Coax Cable for 12G-SDI



For more Information
please call

1-800-Belden1



General Description:

RG-11/U type, 14 AWG solid .064" silver-plated copper conductor, gas-injected foam HDPE insulation, Duofoil® bonded to core + tinned copper braid shield (95% coverage) + bonded to jacket, PVC jacket.

Usage (Overall)

Suitable Applications: SMPTE 2081-2 12 Gb/s UHD TV, SMPTE 2081-1 6 Gb/s UHD TV, SMPTE 424M 3 Gb/s HD-SDI 1080p

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	14	Solid	SPC - Silver-Plated Copper	0.064

Total Number of Conductors: 1

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.280

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)	Description
1	Bonded Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100.000	Bonded to insulation
2		Braid	TC - Tinned Copper	95.000	
3	Bonded Beldfoil® with shorting fold	Tape	Polyester Tape-Aluminum Foil		Bonded to jacket

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 0.400 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +75°C

Bulk Cable Weight: 87 lbs/1000 ft.

Max. Recommended Pulling Tension: 145 lbs.

Min. Bend Radius/Minor Axis: 4 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMG

EU Directive 2011/65/EU (ROHS II): Yes

EU CE Mark: Yes

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2004

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

MII Order #39 (China RoHS): Yes

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RG Type: 11/U

Flame Test

UL Flame Test: UL1666 Vertical Shaft

CSA Flame Test: FT4

Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes - Black only.

Suitability - Aerial: Yes - Black only, when supported by messenger wire.

Suitability - Burial: No

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

75

Nom. Inductance:

Inductance (µH/ft)

0.097

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

16.0

Nominal Velocity of Propagation:

VP (%)

85

Nominal Delay:

Delay (ns/ft)

1.21

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

2.5

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

1.5

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1.000	0.160
3.580	0.300
5.000	0.340
6.000	0.370
7.000	0.390
10.000	0.450
12.000	0.490
25.000	0.670
67.500	1.040
71.500	1.070
88.500	1.170
100.000	1.240
135.000	1.410
143.000	1.450
180.000	1.610
270.000	1.960
360.000	2.270
540.000	2.810
720.000	3.270
750.000	3.340
1000.000	3.890
1500.000	4.830
2000.000	5.650
2250.000	6.020
3000.000	7.070

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4500.000	8.810
6000.000	10.450
12000.000	16.390

Max. Operating Voltage - UL:

Voltage
300 V RMS

Other Electrical Characteristic 1:

Return Loss: Fixed bridge and termination.

Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5.000	1600.000	23.000
1600.000	4500.000	21.000
4500.000	12000.000	15.000

Sweep Test

Sweep Testing:

Sweep tested 5 MHz to 12 GHz.

Notes (Overall)

Notes: Print legend includes sequential footage marks.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
4731R N3U1000	1,000 FT	96.000 LB	GREEN, MIL		#14 PE/GIFHDLDPPE SH FRPVC
4731R 0021000	1,000 FT	96.000 LB	RED		#14 PE/GIFHDLDPPE SH FRPVC
4731R 0031000	1,000 FT	96.000 LB	ORANGE		#14 PE/GIFHDLDPPE SH FRPVC
4731R 0061000	1,000 FT	96.000 LB	BLUE, LIGHT		#14 PE/GIFHDLDPPE SH FRPVC
4731R 0071000	1,000 FT	96.000 LB	VIOLET		#14 PE/GIFHDLDPPE SH FRPVC
4731R 0101000	1,000 FT	96.000 LB	BLACK		#14 PE/GIFHDLDPPE SH FRPVC
4731R 0105000	5,000 FT	495.000 LB	BLACK		#14 PE/GIFHDLDPPE SH FRPVC

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