



Product: 4731ANH ☑

12 GHz Coax, 4K UHD Precision Video Cable, RG-11/U Type, 75 Ohm, 14 AWG Solid

Product Description

12 GHz Coax, 4K UHD Precision Video Cable, RG-11U Coax, 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, LSZH jacket.

Technical Specifications

Product Overview

Suitable Applications:	SMPTE 2082-1 12 Gb/s UHDTV, SMPTE 2081-1 6 Gb/s UHDTV, SMPTE 424M 3 Gb/s HD-SDI 1080p

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
14	Solid	SC - Silvered Copper	0.064 in	1

Insulation

Material	Nomina	l Diameter
PE - Polyethylene (Foam)	0.280 in	
Table Notes:		Gas Inject

Outer Shield

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
Braid	2	Tinned Copper (TC)		95%
Tape	3	Bi-Laminate (Alum+Poly)	Beldfoil®	

Outer Jacket

Material	Nominal Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.400 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Outer Conductor DCR
2.5 Ohm/1000ft	1.5 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield 15.5 pF/ft

Inductance

Nominal Inductance

Impedance

Nominal Characteristic Impedance
75 Ohm

Return Loss (RL)

Frequency [MHz]	Minimum Return (RL)
5 MHz - 1600 MHz	23 dB
1600 MHz - 4500 MHz	21 dB
4500 MHz - 12000 MHz	15 dB

High Frequency (Nominal/Typical)

1 MHz 0.16 dB/100ft 3.58 MHz 0.30 dB/100ft 5 MHz 0.34 dB/100ft 6 MHz 0.37 dB/100ft 7 MHz 0.39 dB/100ft 10 MHz 0.45 dB/100ft 12 MHz 0.49 dB/100ft 25 MHz 0.67 dB/100ft 55 MHz 0.95 dB/100ft 67.5 MHz 1.04 dB/100ft 71.5 MHz 1.07 dB/100ft 100 MHz 1.24 dB/100ft 135 MHz 1.41 dB/100ft 143 MHz 1.45 dB/100ft 180 MHz 1.61 dB/100ft 270 MHz 1.96 dB/100ft 360 MHz 2.27 dB/100ft 540 MHz 3.27 dB/100ft 750 MHz 3.34 dB/100ft 1000 MHz 4.83 dB/100ft 1500 MHz 4.83 dB/100ft 2250 MHz 6.02 dB/100ft 3000 MHz 7.07 dB/100ft 4500 MHz 8.81 dB/100ft 4500 MHz 10.45 dB/100ft	Frequency [MHz]	Nom. Insertion Loss
5 MHz 0.34 dB/100ft 6 MHz 0.37 dB/100ft 7 MHz 0.39 dB/100ft 10 MHz 0.45 dB/100ft 25 MHz 0.67 dB/100ft 55 MHz 0.95 dB/100ft 1.04 dB/100ft 1.5 MHz 1.07 dB/100ft 1.5 MHz 1.07 dB/100ft 1.5 MHz 1.07 dB/100ft 1.5 MHz 1.17 dB/100ft 1.5 MHz 1.17 dB/100ft 1.5 MHz 1.61 dB/100ft 1.43 MHz 1.41 dB/100ft 1.45 dB/100ft 1.45 dB/100ft 1.50 MHz 1.61 dB/100ft 1.50 MHz 1.96 dB/100ft 1.50 MHz 1.50 MHz 1.50 dB/100ft 1.50 MHz 1.50 MHz 1.50 dB/100ft 1.50 MHz 1.50 dB/100ft 1.500 MHz 1.5	1 MHz	0.16 dB/100ft
6 MHz 0.37 dB/100ft 7 MHz 0.39 dB/100ft 10 MHz 0.45 dB/100ft 12 MHz 0.49 dB/100ft 25 MHz 0.95 dB/100ft 55 MHz 0.95 dB/100ft 1.04 dB/100ft 1.07 dB/100ft 1.07 dB/100ft 1.07 dB/100ft 1.07 dB/100ft 1.08 MHz 1.41 dB/100ft 1.43 MHz 1.45 dB/100ft 1.43 MHz 1.61 dB/100ft 1.96 dB/100ft 1.97	3.58 MHz	0.30 dB/100ft
7 MHz 0.39 dB/100ft 10 MHz 0.45 dB/100ft 12 MHz 0.49 dB/100ft 25 MHz 0.67 dB/100ft 55 MHz 0.95 dB/100ft 67.5 MHz 1.04 dB/100ft 71.5 MHz 1.07 dB/100ft 88.5 MHz 1.17 dB/100ft 100 MHz 1.24 dB/100ft 135 MHz 1.41 dB/100ft 143 MHz 1.45 dB/100ft 180 MHz 1.96 dB/100ft 270 MHz 1.96 dB/100ft 540 MHz 2.27 dB/100ft 720 MHz 3.27 dB/100ft 750 MHz 3.34 dB/100ft 1500 MHz 3.89 dB/100ft 1500 MHz 4.83 dB/100ft 2000 MHz 5.65 dB/100ft 2250 MHz 6.02 dB/100ft 3000 MHz 7.07 dB/100ft 4500 MHz 8.81 dB/100ft	5 MHz	0.34 dB/100ft
10 MHz	6 MHz	0.37 dB/100ft
12 MHz 0.49 dB/100ft 25 MHz 0.67 dB/100ft 55 MHz 0.95 dB/100ft 71.5 MHz 1.07 dB/100ft 88.5 MHz 1.07 dB/100ft 100 MHz 1.24 dB/100ft 135 MHz 1.41 dB/100ft 143 MHz 1.45 dB/100ft 180 MHz 1.96 dB/100ft 160 MHz 1.96 dB/100ft 170 MHz 1.96 dB/100ft 190 MHz 1.96 dB/100ft 190 MHz 190 M	7 MHz	0.39 dB/100ft
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135 MHz 1.41 dB/100ft 143 MHz 1.45 dB/100ft 180 MHz 1.61 dB/100ft 270 MHz 1.96 dB/100ft 360 MHz 2.27 dB/100ft 540 MHz 2.81 dB/100ft 720 MHz 3.27 dB/100ft 750 MHz 3.34 dB/100ft 1000 MHz 3.89 dB/100ft 1500 MHz 4.83 dB/100ft 2000 MHz 5.65 dB/100ft 2250 MHz 6.02 dB/100ft 3000 MHz 7.07 dB/100ft 4500 MHz 8.81 dB/100ft 6000 MHz 10.45 dB/100ft	88.5 MHz	1.17 dB/100ft
143 MHz 1.45 dB/100ft 180 MHz 1.61 dB/100ft 270 MHz 1.96 dB/100ft 360 MHz 2.27 dB/100ft 540 MHz 2.81 dB/100ft 720 MHz 3.27 dB/100ft 750 MHz 3.34 dB/100ft 1000 MHz 3.89 dB/100ft 1500 MHz 4.83 dB/100ft 2000 MHz 5.65 dB/100ft 2250 MHz 6.02 dB/100ft 3000 MHz 7.07 dB/100ft 4500 MHz 8.81 dB/100ft 6000 MHz 10.45 dB/100ft	100 MHz	1.24 dB/100ft
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1500 MHz 4.83 dB/100ft 2000 MHz 5.65 dB/100ft 2250 MHz 6.02 dB/100ft 3000 MHz 7.07 dB/100ft 4500 MHz 8.81 dB/100ft 6000 MHz 10.45 dB/100ft	750 MHz	3.34 dB/100ft
2000 MHz 5.65 dB/100ft 2250 MHz 6.02 dB/100ft 3000 MHz 7.07 dB/100ft 4500 MHz 8.81 dB/100ft 6000 MHz 10.45 dB/100ft	1000 MHz	3.89 dB/100ft
2250 MHz 6.02 dB/100ft 3000 MHz 7.07 dB/100ft 4500 MHz 8.81 dB/100ft 6000 MHz 10.45 dB/100ft	1500 MHz	4.83 dB/100ft
3000 MHz 7.07 dB/100ft 4500 MHz 8.81 dB/100ft 6000 MHz 10.45 dB/100ft	2000 MHz	5.65 dB/100ft
4500 MHz 8.81 dB/100ft 6000 MHz 10.45 dB/100ft	2250 MHz	6.02 dB/100ft
6000 MHz 10.45 dB/100ft	3000 MHz	7.07 dB/100ft
	4500 MHz	8.81 dB/100ft
	6000 MHz	10.45 dB/100ft
12000 MHz 16.39 dB/100ft	12000 MHz	16.39 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.2 ns/ft	85%

Voltage

UL Voltage Rating 300 V RMS

Electrical Characteristics Notes: Return Loss: Fixed bridge and termination

Temperature Range

Operating Temp Range: -30°C To +75°C

Mechanical Characteristics

UV Resistance:	Yes
Bulk Cable Weight:	87 lbs/1000ft
Max. Pull Tension:	145 lbs
Min. Bend Radius/Minor Axis:	4.0 in

Standards

CPR Euroclass:	Dca-s1,d1,a1
RG Type:	11

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Dca
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes

Suitability

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

Plenum/Non-Plenum

Plenum (Y/N):	No

Part Number

Variants

Item #	Color	Put-Up Type	Length
4731ANH G751000	Aqua	Reel	1,000 ft
4731ANH 0101000	Black	Reel	1,000 ft
4731ANH 0061000	Blue, Light	Reel	1,000 ft
4731ANH N3U1000	Green, Mil	Reel	1,000 ft
4731ANH 0071000	Violet	Reel	1,000 ft

Product Notes

	Notes:	Print legend includes sequential footage marks.	l
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History

Update and Revision:	Revision Number: 0.117 Revision Date: 09-10-2021

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