

Part Number: 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

Environmental Space:	LSZH
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	SPC - Silver Plated Copper	0.064 in	1

Conductor Size:	14 AWG

Insulation

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.280 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum/Polyester/Aluminum	Bonded Duofoil® (Bonded to Dielectric)	100.0 %
Braid	2	TC - Tinned Copper		95.0 %
Tape	3	Aluminum/Polyester	Bonded Beldfoil® with shorting fold (bonded to jacket)	

Outer Jacket Material

Material	Nominal Diameter
LSZH - Low Smoke Zero Halogen	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
0.097 µH/ft

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)

Frequency [MHz]	Nom. Insertion Loss
1 MHz MHz	0.16 dB/100ft
3.58 MHz MHz	0.30 dB/100ft
5 MHz MHz	0.34 dB/100ft
6 MHz MHz	0.37 dB/100ft
7 MHz MHz	0.39 dB/100ft
10 MHz MHz	0.45 dB/100ft
12 MHz MHz	0.49 dB/100ft
25 MHz MHz	0.67 dB/100ft
55 MHz MHz	0.95 dB/100ft
67.5 MHz MHz	1.04 dB/100ft
71.5 MHz MHz	1.07 dB/100ft
88.5 MHz MHz	1.17 dB/100ft
100 MHz 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	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
12000 MHz	16.39 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.2 ns/ft	85.0 %

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 Recommended Pulling Tension:	145 lbs
Min Bend Radius/Minor Axis:	4.0 in

Standards

RG Type:	11/U Type

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2016-04-01
CA Prop 65 (CJ for Wire & Cable):	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	Length
4731ANH G751000	Aqua	1,000 ft
4731ANH 0101000	Black	1,000 ft
4731ANH 0061000	Light Blue	1,000 ft
4731ANH N3U1000	Mil Green	1,000 ft
4731ANH 0071000	Violet	1,000 ft

Product Notes

Notes:	Print legend includes sequential footage marks.

History

Update and Revision:	Revision Number: 0.11 Revision Date: 07-11-2019

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