



**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
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**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
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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
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#### 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
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#### 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
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## 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.
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## History

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