



Part Number: 4731P

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

Product Description

12 GHz, 4K UHD Precision Video Coax, 75 Ohm RG11 Type 14 AWG solid silver plated copper conductor, foam FEP core, Duofoil® bonded to core+95% tinned copper braid+Duofoil®, CMP, PVDF 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
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Physical Characteristics (Overall)

Conductor

AWG	Material	Nominal Diameter	No. of Coax
14	SPC - Silver Plated Copper	0.064 in	1

Conductor Size:	14 AWG
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Insulation

Material	Nominal Diameter
FFEP - Foam Fluorinated Ethylene Propylene	0.274 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	Aluminium / Polyester / Aluminium	Duofoil®	

Outer Jacket Material

Material	Nominal Diameter
PVDF - Polyvinylidene Fluoride	0.348 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Outer Conductor DCR
6.3 Ohm/1000ft	2.9 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
16.1 pF/ft

Inductance

Nominal Inductance
0.103 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	0.16 dB/100ft
3.58 MHz	0.31 dB/100ft
5 MHz	0.36 dB/100ft
6 MHz	0.39 dB/100ft
7 MHz	0.41 dB/100ft
10 MHz	0.48 dB/100ft
12 MHz	0.52 dB/100ft
25 MHz	0.71 dB/100ft
55 MHz	1.03 dB/100ft
67.5 MHz	1.13 dB/100ft
71.5 MHz	1.16 dB/100ft
88.5 MHz	1.29 dB/100ft
100 MHz	1.36 dB/100ft
135 MHz	1.57 dB/100ft
143 MHz	1.62 dB/100ft
180 MHz	1.82 dB/100ft
270 MHz	2.28 dB/100ft
360 MHz	2.70 dB/100ft
540 MHz	3.46 dB/100ft
720 MHz	4.15 dB/100ft
750 MHz	4.26 dB/100ft
1000 MHz	5.11 dB/100ft
1500 MHz	6.64 dB/100ft
2000 MHz	8.01 dB/100ft
2250 MHz	8.65 dB/100ft
3000 MHz	10.51 dB/100ft
4500 MHz	13.61 dB/100ft
6000 MHz	16.44 dB/100ft
12000 MHz	25.89 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.22 ns/ft	83.0 %

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Operating Temp Range:	-20°C To +125°C
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Mechanical Characteristics

Bulk Cable Weight:	78 lbs/1000ft
Max Recommended Pulling Tension:	145 lbs
Min Bend Radius/Minor Axis:	3.5 in

Standards

NEC/(UL) Specification:	CMP
RG Type:	11/U Type
RG / Series 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 2015/863/EU:	Yes
EU Directive Compliance:	Yes
EU CE Mark:	No
EU RoHS Compliance Date (yyyy-mm-dd):	2018-03-20
CA Prop 65 (CJ for Wire & Cable):	Yes

Suitability

Suitability - Indoor:	Yes
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Flammability, LS0H, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
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Part Number

Non-Plenum Number:	4731R
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Variants

Item #	Color
4731P 0101000	Black

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