



Product: [7731A](#) 

Serial Digital Coax, RG11, #14 Solid BC, Foil + 95% TC braid, CMR

Product Description

Low Loss Serial Digital Coax, Riser-CMR, RG11 14 AWG solid bare copper conductor, foam HDPE core, Duofoil, +95% tinned copper braid, PVC jacket

Technical Specifications

Product Overview

Suitable Applications:	SMPTE 2081-1 6 Gb/s UHDTV, SMPTE 424M 3 Gb/s HD-SDI 1080p
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Physical Characteristics (Overall)

Conductor

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

Conductor Count:	1
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Insulation

Material	Nominal Diameter
PE - Polyethylene (Foam)	0.28 in

Insulation, Table Note:	Gas Injected
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Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Alum / Poly / Alum	Duofoil®	100 %
Braid	2	TC - Tinned Copper		95 %

Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.4 in

Electrical Characteristics

Conductor DCR

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

Capacitance

Nom. Capacitance Conductor to Shield
16 pF/ft

Inductance

Nominal Inductance
0.097 µH/ft

Impedance

Nominal Characteristic Impedance
75 Ohm

Return Loss (RL)

Frequency [MHz]	Minimum Return (RL)
5-1600 MHz	23 dB
1600-4500 MHz	21 dB
4500-6000 MHz	15 dB

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.16 dB/100ft
3.58 MHz	0.29 dB/100ft
5 MHz	0.34 dB/100ft
7 MHz	0.39 dB/100ft
10 MHz	0.46 dB/100ft
67.5 MHz	1.05 dB/100ft
71.5 MHz	1.09 dB/100ft
88.5 MHz	1.21 dB/100ft
100 MHz	1.28 dB/100ft
135 MHz	1.47 dB/100ft
143 MHz	1.51 dB/100ft
180 MHz	1.69 dB/100ft
270 MHz	1.97 dB/100ft
360 MHz	2.31 dB/100ft
540 MHz	2.87 dB/100ft
720 MHz	3.40 dB/100ft
750 MHz	3.45 dB/100ft
1000 MHz	3.60 dB/100ft
1000 MHz	4.12 dB/100ft
1500 MHz	5.10 dB/100ft
2000 MHz	6.04 dB/100ft
2250 MHz	6.43 dB/100ft
3000 MHz	7.63 dB/100ft
4500 MHz	9.56 dB/100ft
6000 MHz	11.53 dB/100ft

Delay

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

Voltage

UL Voltage Rating
300 V RMS

Electrical Characteristics Notes:	TDR Impedance: 75 +/- 3 Ohms
Other Electrical Characteristic 2:	Return Loss: Fixed bridge and termination

Temperature Range

UL Temp Rating:	75°C
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 in

Standards

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
CPR Euroclass:	Eca
RG Type:	11/U Type

Applicable Environmental and Other Programs

Environmental Space:	Indoor/Outdoor
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/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:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
MII Order #39 (China RoHS):	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

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1666 Vertical Shaft
CSA Flammability:	FT4
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	7732A

Part Number

Variants

Item #	Color	Putup Type	Length	UPC/EAN
7731A.00152	Black	Reel	152 m	8719605013545
7731A.00305	Black	Reel	305 m	8719605013569
7731A 010500	Black	Reel	500 ft	612825436058
7731A 0101000	Black	Reel	1,000 ft	612825357438
7731A.001220	Black	Reel	1,220 m	8719605013538
7731A.002000	Black	Reel	2,000 m	8719605013552
7731A 0104000	Black	Reel	4,000 ft	612825357339
7731A 0105000	Black	Reel	5,000 ft	612825357247
7731A.03152	Blue	Reel	152 m	8719605013637
7731A.03305	Blue	Reel	305 m	8719605013644
7731A.031220	Blue	Reel	1,220 m	8719605013620
7731A 0061000	Blue, Light	Reel	1,000 ft	612825357391
7731A 0064000	Blue, Light	Reel	4,000 ft	612825436119
7731A 0065000	Blue, Light	Reel	5,000 ft	612825358589
7731A 0011000	Brown	Reel	1,000 ft	612825357216
7731A 0014000	Brown	Reel	4,000 ft	612825357209
7731A 0081000	Gray	Reel	1,000 ft	612825357360
7731A 0084000	Gray	Reel	4,000 ft	612825358572
7731A.08305	Gray, Slate	Reel	305 m	8719605013743
7731A.081220	Gray, Slate	Reel	1,220 m	8719605013736
7731A.02305	Green	Reel	305 m	8719605013613
7731A.021220	Green	Reel	1,220 m	8719605013606
7731A N3U1000	Green, Mil	Reel	1,000 ft	612825357230
7731A N3U4000	Green, Mil	Reel	4,000 ft	612825408703
7731A.06305	Orange	Reel	305 m	8719605013705
7731A 0031000	Orange	Reel	1,000 ft	612825357308

7731A.061220	Orange	Reel	1,220 m	8719605013699
7731A 0034000	Orange	Reel	4,000 ft	612825357421
7731A.05305	Purple	Reel	305 m	8719605013682
7731A.051220	Purple	Reel	1,220 m	8719605013675
7731A.01152	Red	Reel	152 m	8719605013583
7731A.01305	Red	Reel	305 m	8719605013590
7731A 0021000	Red	Reel	1,000 ft	612825357346
7731A.011220	Red	Reel	1,220 m	8719605013576
7731A 0024000	Red	Reel	4,000 ft	612825357353
7731A 0071000	Violet	Reel	1,000 ft	612825357384
7731A 0074000	Violet	Reel	4,000 ft	612825357377
7731A.07305	White	Reel	305 m	8719605013729
7731A 0091000	White	Reel	1,000 ft	612825357322
7731A.071220	White	Reel	1,220 m	8719605013712
7731A 0094000	White	Reel	4,000 ft	612825358565
7731A.04305	Yellow	Reel	305 m	8719605013668
7731A 0041000	Yellow	Reel	1,000 ft	612825357414
7731A.041220	Yellow	Reel	1,220 m	8719605013651
7731A 0044000	Yellow	Reel	4,000 ft	612825357407

Footnote:	C - CRATE REEL PUT-UP.
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Product Notes

Notes:	Print legend includes sequential footage marks.
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History

Update and Revision:	Revision Number: 0.284 Revision Date: 04-28-2020
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