



## 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

Environmental Space:	Indoor/Outdoor
Suitable Applications:	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	BC - Bare Copper	0.064 in	1

Conductor Count:	1
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##### Insulation

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.28 in

##### Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum/Polyester/Aluminum	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

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	UPC	Length	Footnote
7731A.001220	Black		1,220 m	
7731A.00152	Black		152 m	
7731A.002000	Black		2,000 m	
7731A.00305	Black		305 m	
7731A 0101000	Black	612825357438	1,000 ft	C
7731A 0104000	Black	612825357339	4,000 ft	C
7731A 010500	Black	612825436058	500 ft	C
7731A 0105000	Black	612825357247	5,000 ft	
7731A.031220	Blue		1,220 m	
7731A.03152	Blue		152 m	
7731A.03305	Blue		305 m	
7731A 0061000	Blue, Light	612825357391	1,000 ft	
7731A 0064000	Blue, Light	612825436119	4,000 ft	C
7731A 0065000	Blue, Light	612825358589	5,000 ft	
7731A 0011000	Brown	612825357216	1,000 ft	
7731A 0014000	Brown	612825357209	4,000 ft	C
7731A 0081000	Gray	612825357360	1,000 ft	
7731A 0084000	Gray	612825358572	4,000 ft	C
7731A.081220	Gray, Slate		1,220 m	
7731A.08305	Gray, Slate		305 m	
7731A.021220	Green		1,220 m	
7731A.02305	Green		305 m	
7731A N3U1000	Green, Mil	612825357230	1,000 ft	C
7731A N3U4000	Green, Mil	612825408703	4,000 ft	C
7731A.061220	Orange		1,220 m	
7731A.06305	Orange		305 m	
7731A 0031000	Orange	612825357308	1,000 ft	

7731A 0034000	Orange	612825357421	4,000 ft	C
7731A.051220	Purple		1,220 m	
7731A.05305	Purple		305 m	
7731A.011220	Red		1,220 m	
7731A.01152	Red		152 m	
7731A.01305	Red		305 m	
7731A 0021000	Red	612825357346	1,000 ft	C
7731A 0024000	Red	612825357353	4,000 ft	C
7731A 0071000	Violet	612825357384	1,000 ft	C
7731A 0074000	Violet	612825357377	4,000 ft	C
7731A.071220	White		1,220 m	
7731A.07305	White		305 m	
7731A 0091000	White	612825357322	1,000 ft	
7731A 0094000	White	612825358565	4,000 ft	C
7731A.041220	Yellow		1,220 m	
7731A.04305	Yellow		305 m	
7731A 0041000	Yellow	612825357414	1,000 ft	
7731A 0044000	Yellow	612825357407	4,000 ft	C

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: 0.278 Revision Date: 01-31-2020
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