

7731A Coax - Low Loss Serial Digital Coax



For more Information
please call

1-800-Belden1

**General Description:**

RG-11/U type, 14 AWG solid .064" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), PVC jacket.

Usage (Overall)

Suitable Applications:

SMPTE 2081-1 6 Gb/s UHDTV, SMPTE 424M 3 Gb/s HD-SDI 1080p

Physical Characteristics (Overall)**Conductor**

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	14	Solid	BC - Bare Copper	1.6256

Total Number of Conductors:

1

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	7.112

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	95

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter:

10.160 mm

Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +75°C

Bulk Cable Weight: 129.473 Kg/Km

Max. Recommended Pulling Tension: 644.989 N

Min. Bend Radius/Minor Axis: 101.600 mm

Applicable Specifications and Agency Compliance (Overall)**Applicable Standards & Environmental Programs**

NEC/(UL) Specification: CMR

CEC/(UL) Specification: CMG

EU Directive 2011/65/EU (RoHS II): Yes

EU CE Mark: Yes

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2004

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

MII Order #39 (China RoHS): Yes

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RG Type:	11/U
Flame Test	
UL Flame Test:	UL1666 Vertical Shaft
CSA Flame Test:	FT4
Suitability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only.
Suitability - Aerial:	Yes - Black only, when supported by messenger wire.
Suitability - Burial:	No
Plenum/Non-Plenum	
Plenum (Y/N):	No
Plenum Number:	7732A

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (µH/m)
0.318257

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
52.496

Nominal Velocity of Propagation:

VP (%)
85

Nominal Delay:

Delay (ns/m)
3.97001

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
8.2025

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
4.9215

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1.000	0.525
3.580	0.951
5.000	1.116
7.000	1.280
10.000	1.509
67.500	3.445
71.500	3.576
88.500	3.970
100.000	4.200
135.000	4.823
143.000	4.954
180.000	5.545
270.000	6.464
360.000	7.579
540.000	9.416
720.000	11.155
750.000	11.319
800.000	11.812
1000.000	13.518
1500.000	16.733
2000.000	19.817
2250.000	21.097
3000.000	25.034
4500.000	31.366
6000.000	37.830

METRIC MEASUREMENT VERSION

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Max. Operating Voltage - UL:

Voltage
300 V RMS

Other Electrical Characteristic 1:

TDR Impedance: 75 +/- 3 Ohms

Other Electrical Characteristic 2:

Return Loss: Fixed bridge and termination.

Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5.000	1600.000	23.000
1600.000	4500.000	21.000
4500.000	6000.000	15.000

Sweep Test

Sweep Testing:

100#37; Sweep tested 5 MHz to 6 GHz.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7731A N3U1000	1,000 FT	92.000 LB	GREEN, MIL	C	#14 PE/GIFHDLDP SH FRPVC
7731A N3U4000	4,000 FT	376.000 LB	GREEN, MIL	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0011000	1,000 FT	92.000 LB	BROWN		#14 PE/GIFHDLDP SH FRPVC
7731A 0014000	4,000 FT	376.000 LB	BROWN	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0021000	1,000 FT	92.000 LB	RED	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0024000	4,000 FT	376.000 LB	RED	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0031000	1,000 FT	92.000 LB	ORANGE		#14 PE/GIFHDLDP SH FRPVC
7731A 0034000	4,000 FT	376.000 LB	ORANGE	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0041000	1,000 FT	92.000 LB	YELLOW		#14 PE/GIFHDLDP SH FRPVC
7731A 0044000	4,000 FT	376.000 LB	YELLOW	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0061000	1,000 FT	92.000 LB	BLUE, LIGHT		#14 PE/GIFHDLDP SH FRPVC
7731A 0064000	4,000 FT	376.000 LB	BLUE, LIGHT	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0071000	1,000 FT	92.000 LB	VIOLET	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0074000	4,000 FT	376.000 LB	VIOLET	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0081000	1,000 FT	92.000 LB	GRAY		#14 PE/GIFHDLDP SH FRPVC
7731A 0084000	4,000 FT	376.000 LB	GRAY	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0091000	1,000 FT	92.000 LB	WHITE		#14 PE/GIFHDLDP SH FRPVC
7731A 0094000	4,000 FT	376.000 LB	WHITE	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0101000	1,000 FT	92.000 LB	BLACK	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0104000	4,000 FT	376.000 LB	BLACK	C	#14 PE/GIFHDLDP SH FRPVC
7731A 010500	500 FT	46.500 LB	BLACK	C	#14 PE/GIFHDLDP SH FRPVC

Notes:

C = CRATE REEL PUT-UP.

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