



Product: [4505ELW](#) 

4K UHD Coax for 12G-SDI, 75 Ohm, RG-59, 20 AWG Solid SC, Foil + 95% TC Braid, LSZH Jkt

Product Description
75 Ohm SDI Coax, RG-59, 20 AWG Solid Silvered Copper Conductor, PE Insulation, Foil + 95% Tinned Copper Braid Shield, LSZH Jacket

Technical Specifications

Product Overview

Suitable Applications:	Ultra-High Definition Digital Video, 4K Single-link 12 Gb/s UHDTV, 4K D-Cinema, 8K Quad-link UHDTV, HD-SDI 1080p
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Construction Details

RG Type:	59
Series Type:	59

Conductor

No. of Elements	Size	Stranding	Nom. Diameter	Material
1	20 AWG	Solid	0.81 mm	SC - Silvered Copper

Insulation

Material	Nom. Insulation Diameter
PE - Polyethylene (Foam)	3.68 mm (0.145 in)

Table Notes:	Gas Injected
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Outer Shield

Layer	Outer Shield Type	Material	Material Trade Name	Coverage
1	Tape	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
2	Braid	Tinned Copper (TC)		95%

Outer Jacket

Material	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	5.97 mm (0.235 in)

Electrical Characteristics

Return Loss (RL)

Frequency	Min. Return Loss
5 - 1600 MHz	23 dB
1600 - 4500 MHz	21 dB
4500 - 12000 MHz	15 dB

Attenuation

Frequency	Nom. Attenuation
1 MHz	0.98 dB/100m
3.58 MHz	1.97 dB/100m
5 MHz	2.1 dB/100m
6 MHz	2.3 dB/100m
7 MHz	2.4 dB/100m
10 MHz	3.0 dB/100m

12 MHz	3.0 dB/100m
25 MHz	4.3 dB/100m
55 MHz	6.5 dB/100m
67.5 MHz	6.7 dB/100m
71.5 MHz	6.9 dB/100m
88.5 MHz	7.2 dB/100m
100 MHz	7.5 dB/100m
135 MHz	8.9 dB/100m
143 MHz	9.2 dB/100m
180 MHz	10.2 dB/100m
270 MHz	12.5 dB/100m
360 MHz	14.4 dB/100m
540 MHz	18.0 dB/100m
720 MHz	21.0 dB/100m
750 MHz	21.3 dB/100m
1000 MHz	24.9 dB/100m
1500 MHz	30.5 dB/100m
2000 MHz	35.4 dB/100m
2250 MHz	37.7 dB/100m
3000 MHz	44.0 dB/100m
4500 MHz	54.8 dB/100m
6000 MHz	64.6 dB/100m
12000 MHz	94.1 dB/100m

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
32 Ohm/km (9.8 Ohm/1000ft)	12 Ohm/km (3.7 Ohm/1000ft)	53 pF/m (16 pF/ft)	75 Ohm	83%

Mechanical Characteristics

Temperature

Operating	Installation
-30°C to +75°C	-5°C To +50°C

Bend Radius

Stationary Min.	Installation Min.
60 mm (2.4 in)	60 mm (2.4 in)

Max. Pull Tension:	200 N (45 lbf)
Bulk Cable Weight:	50 kg/km (34 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Indoor - Euroclass Cca, Indoor, Non-Halogenated
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Cca-s1a,d1,a1; CPR UKCA Class: Cca-s1a,d1,a1
ISO/IEC Compliance:	IEC 61034-2 - Smoke Density Min Transmittance = 80%
CENELEC Compliance:	EN 50117-1
European Halogen Free Standards:	IEC 62821-1 Halogen Free Compliance = Yes, IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 2.5 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark

History

Update and Revision:	Revision Number: 0.208 Revision Date: 04-08-2025
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