






Radiolabs Intl Inc. – 3610 Pryor, Ste D, Fortuna, Ca. 95540 [www.radiolabs.com](http://www.radiolabs.com)

**RadioLabs - Flexible Low Loss Wireless Coaxial Cable - 50 Ohms**

<b>Specifications</b>	<b>RL-100 Coax</b>	<b>RL-240 Coax</b>	<b>RL-400 Coax</b>
<ul style="list-style-type: none"> <li>• Impedance: 50 ohms</li> <li>• Foamed Polyethylene</li> <li>• 100% Bonded Aluminum Foil</li> <li>• Tinned Copper Braid - CuSn</li> <li>• Flame-retardant PVC</li> <li>• Polyethylene</li> <li>• Meter markings</li> </ul> Options: FR-PVC & LSZH Sheath is available			
Centre Conductor mm	0.46 Solid BCCS	1.42 Solid BC	2.74 Solid CCA
Insulation mm	1.52	3.81	7.24
1st Shielding	Bonded Aluminum Foil	Bonded Aluminum Foil	Bonded Aluminum Foil
1st Outer Conductor mm	0.10 x 80 CuSn	0.12 x 144 CuSn	0.15 x 192 CuSn
Outer Jacket mm	2.79	6.1	10.29
Min. Bending Radius mm	6.4	19.1	25.4
Tensile Strength in KG	6.8	36.3	72.5

**Low Loss Cable Attenuation (20 °C, dB/100 m) (328.04 Feet of cable)**

f = 30 MHz	12.90	4.40	2.20
f = 50 MHz	16.70	5.70	2.90
f = 100 MHz	23.80	8.20	4.30
f = 150 MHz	29.40	9.90	5.00
f = 220 MHz	35.80	12.00	6.10
f = 450 MHz	51.90	17.30	8.90
f = 900 MHz	74.90	24.80	12.80
f = 1500 MHz	98.70	32.40	16.80
f = 1800 MHz	109.00	35.60	18.60
f = 2000 MHz	115.50	37.70	19.60
f = 2500 MHz *	130.60	42.40	22.20
f = 3000 MHz	143.80	47.10	25.00

\*Loss Equation Example – RL-400 cable has a loss factor of 6.56 dB per 100 feet at 2.4 GHz, or, .0656 dB per foot of cable used

DC Resistance (Centre Conductor) Ω/km	266	10	3.07
DC Resistance (Outer Conductor) Ω/km	31.2	12.76	6.88
Insulation Resistance Ω/km	5000	5000	5000
Dielectric Strength Kv	1.6	1.6	1.6
Velocity ratio %	66%	85%	87%
Peak Power Rating Kw	0.6	5.6	16
Cut Off Frequency GHz	90	31	16.2
Voltage Withstand VDC	500	1500	2500
Capacitance	101.1pF +/- 3 per M	79.4pF +/- 3 per M	78.4pF +/- 3 per M
Screening factor at 1 - 1000MHz	> 90dB	> 90dB	> 90dB
Admissible ambient temperature °C	-40°C to 80°C	-40°C to 80°C	-40°C to 80°C