

**SG238**

Ground plane omni antenna, 0 dBd gain, 118-174 MHz

- Broadband omni-directional antenna for ground-to-air applications
- Constructed of selected aluminum alloy and stainless steel
- A heavy-duty version is also available

The SG238 is a broadband omni-directional antenna offering a low VSWR over the 118-174 MHz frequency range. Constructed of selected aluminum alloy and stainless steel, the SG238 is designed to withstand winds of 110 mph while supporting 0.5 inches of radial ice. The antenna DC grounded for lightning protection.

Model	Description	Pattern
<a href="#">SG238-SF1SNM</a>	0 dBd gain, N (male) connector, 118-138 MHz	Omni-directional
<a href="#">SG238-SF2SNM</a>	0 dBd gain, N (male) connector, 136-160 MHz	Omni-directional
<a href="#">SG238-SF3SNM</a>	0 dBd gain, N (male) connector, 150-174 MHz	Omni-directional



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Product Specification Sheet		SG238		Dated: 05-02-10

[SG238-SF1SNM](#)

[SG238-SF2SNM](#)

[SG238-SF3SNM](#)

**Electrical Specifications**

Frequency Range, MHz	118 to 138	136 to 160	150 to 174
Gain (nominal), dBd (dBi)	unity (2.1)	unity (2.1)	unity (2.1)
Input VSWR (max)	2:1	2:1	2:1
Polarization	vertical	vertical	vertical
Pattern	Omni-directional	Omni-directional	Omni-directional
Vertical beamwidth, degrees	71	71	71
Average Power Input (max), W	250	250	250
Lightning protection	DC ground	DC ground	DC ground

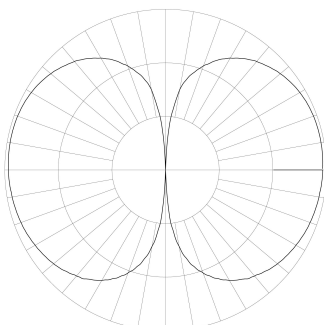
**Mechanical Specifications**

Connector	N (male)	N (male)	N (male)
Length/ Height, in (mm)	67 (1702)	67 (1702)	67 (1702)
Width, in (mm)	26.5 (673)	26.5 (673)	26.5 (673)
Depth, in (mm)	26.5 (673)	26.5 (673)	26.5 (673)
Base pipe diameter, in (mm)	1.5 (38)	1.5 (38)	1.5 (38)
Base pipe mounting length, in (mm)	15 (381)	15 (381)	15 (381)
Weight, lbs (kg)	11.5 (5.2)	11.5 (5.2)	11.5 (5.2)
Weight iced, lbs (kg)	19.8 (9)	19.8 (9)	19.8 (9)
Shipping dimensions, in (mm)	72x7.2x7.2 (1829x183x183)	72x6x6 (1829x152x152)	72x6x6 (1829x152x152)
Mounting hardware	0.75-2.28" O.D. pipe and 135 Clamp	0.75-2.28" O.D. pipe and 135 Clamp	0.75-2.28" O.D. pipe and 135 Clamp

**Environmental Specifications**

Temperature range, °F (°C)	-40 to +140 (-40 to +60)	-40 to +140 (-40 to +60)	-40 to +140 (-40 to +60)
Wind Loading Area (Flat Plate Equivalent), ft <sup>2</sup> (m <sup>2</sup> )	0.57 (0.05)	0.57 (0.05)	0.57 (0.05)
Wind Loading Area (ice), ft <sup>2</sup> (m <sup>2</sup> )	1.33 (0.12)	1.33 (0.12)	1.33 (0.12)
Rated wind velocity (no ice), mph (km/h)	175 (282)	175 (282)	175 (282)
Rated wind velocity (1/2" radial ice), mph (km/h)	110 (177)	110 (177)	110 (177)
Lateral thrust (100mph), lbs (N)	23 (102.3)	23 (102.3)	23 (102.3)
Bending moment, ft-lbs (Nm)	38 (51.3)	38 (51.3)	38 (51.3)
Tip deflection, degrees	0.5	0.5	0.5

SINCLAIR TECHNOLOGIES



MEASURED RADIATION PATTERN  
VERTICAL POLARIZATION

Elevation  
Relative Gain - 10 dB per Division

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