

Antennas Low Band, Aviation, and VHF Antennas ST221-LP Series

ST221-SF1SNF(FXXXX-LP)

Low profile for a wide range of mobile applications

Mobile omni, 0 dBd, Low profile, 1.5 MHz B.W., 159.5-163.5 MHz

- Cast aluminum
- · Highly durable and resistant to damage

A minimum 48" x 48" ground plane is required.

The Excaliber ST221 antenna has become a North American standard for railroad and locomotive applications. The new lower profile version of this antenna, ST221-LP series, is now available for 159.5 MHz to 225 MHz range. The F1 model can be tuned over 159.5-163.5 MHz, F2 model 170-195 MHz, and the F3 model 190-225 MHz. With a footprint that is the same as the classic Excaliber ST221 antenna, but with the height being just 2.5 inches (6.35 cm) instead of 4.0 inches (10.16 cm), the ST221-LP is primarily designed for applications where antennas must be installed in an extremely low profile radio compartment or an antenna radome located on the vehicle's rooftop (may require retuning when installed under radome).



Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
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Product Specification Sheet EPR 018561		ST221-SF1SNF(FXXXX-LP)	Issue: 4	Dated: 14-12-16 Dated: 25-01-16
Customer Tech Manual 006193		Sinclair's commitment to product leadership may result in improvement or change to this product		

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Electrical Specifications			
Frequency Range	MHz	159.5 to 163.5	
Bandwidth	MHz	1.5	
Connector		N-Female	
Gain (nominal)	dBd (dBi)	unity (2.1)	
Input VSWR (max)		1.5:1	
Polarization		vertical	
Impedance	Ω	50	
Pattern		Omni-directional	
Average Power Input (max)	W	300	
Lightning protection		DC ground	

Mechanical Specifications

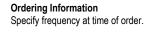
Width	in (mm)	2.2 (56)
Length	in (mm)	24.5 (622)
Height	in (mm)	2.5 (64)
Weight	lbs (kg)	3.9 (1.77)
Actual shipping weight	lbs (kg)	6 (2.72)
Shipping dimensions	in (mm)	3x5x25 (76x127x635)
Ground Plane (min)	in (mm)	48x48
Mounting hardware		HK221A

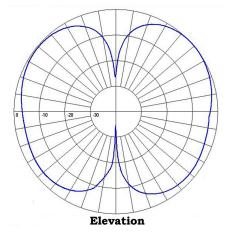
°F (°C)

Environmental Specifications

Tomporature renge	
Temperature range	

-40 to +140 (-40 to +60)





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