

Presenting Excelsior™ mobile antennas - Superior quality that defines all Sinclair products.

Like all Sinclair products, our Excelsior™ mobile antennas are built to last and offer customers proven solutions for all their mission critical communication needs. The Excelsior™ line of mobile whip antennas consists of premier quality components and materials to ensure maximum performance under extreme conditions. These versatile antennas cover a frequency range from 40-970 MHz and feature strong ABS housing that does not chalk. Stainless steel fittings are molded into the housing without glue, and an integral Santoprene™ gasket completely waterproofs the base, preventing damage from moisture and rust. All Excelsior™ antennas are made of high quality rust resistant stainless steel to ensure durability. Superior components and rugged construction makes the Excelsior™ antennas ideal for mission critical and heavy transport applications.



Excelsior™ Features

- 1. Rugged ABS Base Housing** - UV resistant and weatherproofed, will not chalk, fade or crack. Uniquely designed stainless steel fittings inhibit rust and corrosion and are molded into the housing without glue or fasteners. This ensures a reliable long lasting product even in severe environments.
- 2. Unique Gasket Design** - Ensures base is completely waterproof and provides excellent mounting potential on both flat and curved surfaces.
- 3. High Quality Whips** - All whips are made with high quality stainless steel. Longer whips are tapered to minimize damage from impact while remaining vertically positioned at high speeds.
- 4. Unbeatable Warranty** - Sinclair's two year warranty is the best in the industry.
- 5. Broad Product Range** - Offering ultimate coverage solutions:
 - Frequency coverage 40-970 MHz and Gain from 0 to 6 dBd.
 - Narrowband and Wideband models available.
 - No Ground Plane versions available for surfaces that lack a suitable grounding surface, e.g. fiberglass vehicles, boats etc.
 - Stainless steel spring or non-spring ferrule options.
- 6. Modular Design** - Flexible design featuring interchangeable base coils, ferrules and whips enables 132 different models to be constructed by combining only 6 ferrules, 20 base coils and 34 whips. Interchangeability of ferrules and springs create product flexibility while reducing inventory costs.
- 7. Customizable Accessories** - Sinclair offers NMO magnetic mounts for mobile antennas.



Magnetic Mount

SW-2340(X)-(Y)

Tri-band whip antenna



Stainless steel version shown

- **Multi-band radio support** - one antenna that covers VHF / UHF / 700 / 800 / 900 MHz bands
- **Stylish and Robust** - low profile housing that is not only stylish but also minimizes potential damage from overhangs. It comes in either a black or silver finish
- **Weather-Proof** - this antenna is IP67 rated, ensuring complete protection against dust, is able to withstand heavy rain and water immersion.
- **NMO interface** - the antenna uses an NMO mount for easy installation on all vehicles.

Part#	Color	Shock Spring
SW-2340S-1	Stainless Steel	Yes
SW-2340SB-1	Black	Yes

TECHNICAL SPECIFICATIONS

Electrical Specifications

Frequency Range 1 (F1)	136 to 174 MHz
Bandwidth (F1)	38 MHz
Frequency Range 2 (F2)	430 to 512 MHz
Bandwidth (F2)	82 MHz
Frequency Range 3 (F3)	694 to 960 MHz
Gain F1(nominal)	2 dBi
Bandwidth (F3)	266 MHz
Input VSWR 1 (Typ)	2.35:1
Gain F2 (nominal)	4 dBi
Input VSWR 2 (max)	2:1
Gain F3 (nominal)	5 dBi
Input VSWR 3 (max)	2:1
Connector	NMO
Polarization	Vertical
Impedance	50 Ω
Pattern	Omni-directional
Average Input Power (max)	100 W

Mechanical Specifications

Width	1.83 in (46 mm)
Depth	1.83 in (46 mm)
Length/ Height	20.25 in (514 mm)
Mounting configurations	Upright
Ingress protection	IP67
RoHS	Compliant

Environmental Specifications

Temperature range	-49 to +140 °F (-45 to +60 °C)
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AB-M1 Series

Magnetic Mount



- Outstanding pull strength for secure mount
- Rugged design with IP66 rating for long life and corrosion resistance
- Connector and cable configurations customizable

TECHNICAL SPECIFICATIONS

Electrical Specifications

Connector Various options available

Mechanical Specifications

Height 1.3 in (33 mm)

Diameter 3.74 in (95 mm)

Mounting information NMO: 1-1/8"-18 thread

Estimated Shipping Weight 3 lbs (1.36 kg)

Shipping dimensions 8 x 8 x 8 in (203 x 203 x 203 mm)

Colour Black

Ingress protection IP66

Environmental Specifications

Temperature range -49 to +140 °F (-45 to +60 °C)

Model Name	Description
AB-M1-01-500-BM-A	RG58/U, 5 meters/16'5", BNC(m), Attached
AB-M1-01-500-NM-A	RG58/U, 5 meters/16'5", N(m), Attached

SINCLAIR TECHNOLOGIES

Sinclair Technologies is a global leader in the design and manufacture of high-quality fixed and mobile antennas, filters, combiners, and related products. Designed to function in extreme conditions, Sinclair's products have a globally recognized reputation for quality, reliability, durability, and value. For over 60 years, Sinclair has provided custom-designed antennas and RF signal conditioning products to fit our customer's unique requirements. From simple to complex issues, Sinclair offers antenna and RF signal conditioning solutions for the public safety and transportation industry paired with the industry's best RF expertise.



Mobile Antenna Series	Frequency (MHz)	Bandwidth (Typical)	Ground Plane REQ'D	Gain (dBd)	Style	Note
Low Band						
SVB-0270(X)	27 - 30	0.75 MHz	Y	0	1/4 wave	
SVB-0300(X)	30 - 34	1 MHz	Y	0	1/4 wave	
SVB-0400(X)	40 - 48	2 MHz	Y	0	1/4 wave	
SVB-0470(X)	47 - 54	2.5 MHz	Y	0	1/4 wave	
VHF						
SVB-0660(X)	66 - 118	4.5 MHz	Y	0	1/4 wave	
SVB-1560(X)	138 - 174	36 MHz	Y	0	1/4 wave	
SW-1560(X)	138 - 174	36 MHz	Y	0	1/4 wave	Enhanced versions of SVB-1560(X) series
SVT-1180-EX(X)	118 - 225	7.5 MHz	Y	0	1/4 wave	
SVT-1180-SP(X)	118 - 512	VHF 7.5 MHz UHF 100 MHz	Y	0	1/4 wave	
SVB-1482(X)	132 - 174	26 MHz	Y	2	1/2 wave	
SW-1482(X)	132 - 174	26 MHz	Y	2	1/2 wave	Enhanced versions of SVB-1482(X) series
SVB-1382(X)	138 - 174	5.25 MHz	N	2	1/2 wave	
SVB-1562(X)	138 - 174	36 MHz	Y	2	1/2 wave	
SVB-1383(X)	138 - 174	5 MHz	Y	3	5/8 wave	
SVB-1443(X)	144 - 174	5 MHz	Y	3	5/8 wave	
UHF						
SUT-4060-EX(X)	406 - 512	10%	Y	0	1/4 wave	
SUT-5120-SP(X)	512 - 970	20%	Y	0	1/4 wave	
SUB-3503(X)	350 - 366	16 MHz	N	3	1/2 wave	
SUB-3803(X)	380 - 400	20 MHz	Y	3	1/2 wave	
SUB-4062(X)	406 - 430	20 MHz	N	2	1/2 wave	
SUB-4063(X)	406 - 430	15 MHz	Y	3	1/2 wave	
SUB-4302(X)	430 - 470	20 MHz	N	3	1/2 wave	
SUB-4702(X)	470 - 512	25 MHz	N	2	1/2 wave	
SUB-4303(X)	430 - 470	15 MHz	Y	3	5/8 wave	
SUB-4703(X)	470 - 512	20 MHz	Y	3	5/8 wave	
Tri-Band						
SW-2340(X)-(Y)	136 - 174 430 - 512 694 - 960	F1: 38 MHz F2: 82 MHz F3: 266 MHz	Y	F1: 2 dBi F2: 4 dBi F3: 5 dBi	1/4 wave	

CONTACT

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