

SM701 SERIES WITH GPS Low profile, universal transport antenna, GPS, wideband, 694-6000MHz

- Covers all 2G, 2.5G, 3G, 3.5G, 4G and dual-band WLAN bands, with a built-in GPS antenna
- Low profile, rugged and waterproof design; one 3/4" hole mount for easy installation
- Metallic ground plane independent: excellent performance with or without a ground plane
- Various connector options available

Future proof that is 5G/CBRS/DSRC/C-V2X ready

Sinclair's SM701 series multifunctional transport antennas are specifically designed to address the need for compact, low profile, broadband antennas used in harsh environment, which makes it truly universal.

Features:

Expandable: one single SM701 antenna can be easily expanded to serve multiple radio systems operating at different frequencies at the same time with the help of crossband coupler expansion kit.

Broad Bandwidth: covers all bands for 2G, 2.5G, 3G, 3.5G, 4G cellular systems as well as dual-band WLAN.

Low Profile: features an unobtrusive low profile housing for added overhead clearance.

Rugged UV protected radome with UL94 HB fire rating offers maximum vibration absorption and ultimate waterproofing.

Metallic ground plane independent: this antenna delivers excellent performance on either metallic or non-metallic vehicle rooftops, and it is also ideal for ceiling mount in an in-building or outdoor wireless distribution system.

This antenna comes with a 1' pigtail on RF antenna port, and the GPS port comes with a 16.4' pigtail.



When ordering, please refer to below chart for the model number and connector configuration. Please contact your Sinclair Sales Representative or Customer Service Representative for more information.

Model Number	RF Connector	GPS connector
SM701-SWBSNF(GPS)	N-female	SMA plug
SM701-SWBSNM(GPS)	N-male	SMA plug
SM701-SWBSBF(GPS)	BNC-female	SMA plug
SM701-SWBSBM(GPS)	BNC-male	SMA plug
SM701-SWBSTF(GPS)	TNC-female	SMA plug
SM701-SWBSTM(GPS)	TNC-male	SMA plug
SM701-SWBSSM(GPS)	SMA-male	SMA plug

Region	United States	Europe, Middle East, and Africa	Canada, Caribbean, and Latin America	Asia-Pacific
Telephone	1 800 263 3275	+44 (0) 1487 84 28 19	Canada: 1 800 263 3275 International: +1 905 726 7676	+1 905 727 0165
E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salescan@sinctech.com	salesasia@sinctech.com

Electrical Specifications

Frequency Range	MHz	694 to 6000	*1
Bandwidth	MHz	5306	*2
Connector		Various options avail.	*3
Gain (nominal)	dBi	2-4	*4
Input VSWR (typ)		2:1	*5
Polarization		vertical	*6
Impedance	Ω	50	*7
Pattern		Omni-directional	*8
Average Input Power (max)	W	200	*9
Lightning protection		DC ground	
GPS Center Frequency	MHz	1575.42	
GPS Output Impedance	Ω	50	
GPS VSWR (max)		2:1	
GPS Power Gain (typ)	dB	28	*10
GPS Supply Voltage Range	VDC	3 to 5	
GPS Current Consumption (typ)		12 mA	
GPS Noise Figure (max)	dB	2	
GPS Pigtail Type		16.4 feet with SMA plug	

Notes

- *1 : RF port
- *2 : RF port
- *3 : Please see the previous page for details.
- *4 : 2-4 dBi on non-metal roof or without extra ground plane. 4-7 dBi on 14" metal ground plane.
- *5 : RF port
- *6 : RF port
- *7 : RF port
- *8 : RF port
- *9 : RF port
- *10: with 3.3 VDC input; 30 dB with 5 VDC plus 3 dB gain from antenna.

Ordering Information

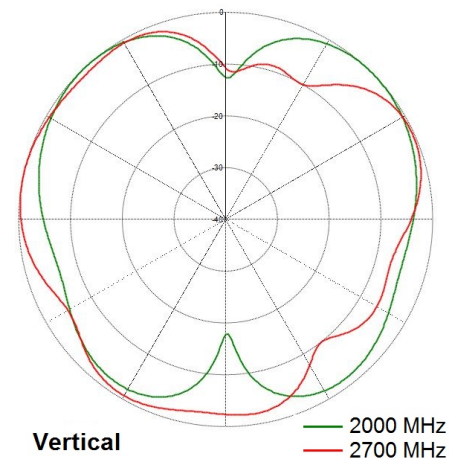
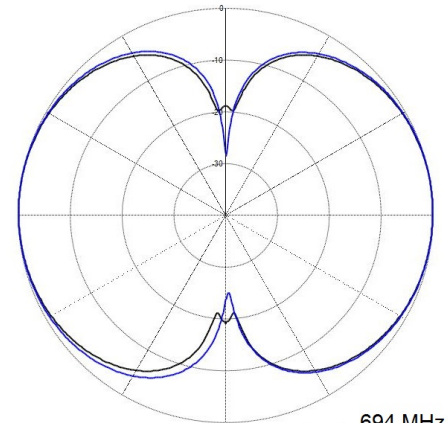
GPS receiving antenna included.
When ordering, please refer to the model list on the previous page for specific model numbers and connector configurations.

Mechanical Specifications

Height	in (mm)	2.6 (66)
Overall Diameter	in (mm)	6.3 (160)
Radome material		UV stabilized ASA, UL94 HB
Weight	lbs (kg)	1.35 (0.61)
Actual shipping weight	lbs (kg)	1.8 (0.82)
Shipping dimensions	in (mm)	10x7x5 (254x178x127)
Radome Colour		White
Ingress protection		IP67

Environmental Specifications

Temperature range	°F (°C)	-40 to +140 (-40 to +60)
Wind Loading Area (1/2" ice)	ft² (m²)	0.06 (0.01)
Horizontal Wind Resistance		1.53 lb



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