

## Multi-band Transport Antenna Multi-band Antenna SM2600D(GPS) Series

## SM600D(WI-GPS) GPS, WiFi, 694-2700MHz diversity low profile transport antenna

- 4 element antenna, dual 694-2700 MHz full band, one GPS and one WiFi
- The 694-2700 MHz twin elements are expandable for multiple radio system or diversity uses
- A maximum height of 4-1/4 inches complies with restriction for locomotives and other vehicles
- · Black weather resistant and fire rated radome provides excellent environmental protection

The SM600D series antenna is intended primarily for wireless coverage in transportation applications. This antenna is designed for ease of installation and minimal visual impact. It features a low profile and unobtrusive black housing that is perfect for mounting to a typical metal vehicle rooftop. Heavy duty base plate equiped with durable gasket provides maintenance free water sealing without RTV. SM600D(Wi-GPS) comes with 4 ports, one for GPS, one for WiFi or WiMax and two for 694-2700 MHz full band. The two broadband ports have identical broadband radiation element. Two identical elements integrated inside the antenna can be used for diversity purpose. They can also be used for different radios providing maximal flexibility for a multiple radio system. Each element covers full frequency range of 694-2700 MHz, can be used for LTE700, LTE2600, 700MHz public safety, WiFi, GSM850, GSM900, GSM1800, GSM1900, AWS, EDGE, WCDMA, CDMA2000. UMTS, PHS, DECT, PCS cellular and more. Each port can support multiple systems simultaneously with Sinclair's cross band combiners including FX2300 series, FX2400 series, FX3400 series, FX4500 series, and other custom combiners. It can also be expanded for multiple uses quickly without interference with the existing service. Please contact Sinclair customer service for the custom combining solution for your system.

The WiFi port covers 2400-6000MHz full band applicable for various WiFi or WiMax systems. With built-in high gain low noise amplifier and saw filter, the active GPS antenna maximizes the GPS receiver performance.

The antenna is fed by typical one foot pigtails, LMR200-FR for Cell/LTE and WiFi and LMR-100A-FR for GPS. Various connector options are available.

## **Application Notes**

- Always check the label on pigtail to make correct connection.
- To perform properly, the antenna needs to be installed on a metal surface with minimum size of 18x28in.



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Electrical Specifications				Notes
Frequency Range 1 (F1)	MHz	694 to 2700	*1	*1 : BW=2006MHz
Gain F1 (typ)	dBd (dBi)	unity (2.1)		*2 : Max 2:1 at frequency band edges
Input VSWR 1 (nominal)		1.5:1	*2	*3 : BW=2006MHz
Pattern (F1)		Omni		*4 : Max 2:1 at frequency band edges *5 : Max 2:1 at frequency band edges
Frequency Range 2 (F2)	MHz	694 to 2700	*3	*6 : 200W for all the cell ports.
Gain F2 (typ)	dBd (dBi)	unity (2.1)		*7 : Exclude WiFi port
Input VSWR 2 (nominal)		1.5:1	*4	
Pattern (F2)		Omni		
Frequency Range 3 (F3)	MHz	2400 to 6000		
Gain F3 (typ)	dBd (dBi)	unity (2.1)		
Input VSWR 3 (nominal)		1.5:1	*5	
Pattern (F3)		Omni		
Polarization		vertical		Ordering Information
Impedance	Ω	50		Specify connector options at time of order.
Pattern		Directional		
Average Power Input (max)	W	5~200	*6	
Connectors	Cell=	SMA Mx2,WiFi=SMA Mx1,GPS=BNC Mx1		
Lightning protection		DC ground	*7	
GPS Center Frequency	MHz	1575.42		
GPS Power Gain (typ)	dB	28		
GPS Supply Voltage Range	VDC	3 to 5		
GPS Current Consumption		12mA		
GPS Output Impedance	Ω	50		
GPS Noise Figure (max)	dB	2		
GPS VSWR		2:1 max		

#### Mechanical Specifications

in (mm)	4.25 (108)
in (mm)	20.88 (530)
in (mm)	11.5 (292)
	UV protected ABS
lbs (kg)	12.3 (5.58)
lbs (kg)	16.3 (7.4)
in (mm)	23x14x10 (584x356x254)
	Black
	5.03lb@100mph
°E (°C)	-40 to +140 (-40 to +60)
ft² (m²)	0.02 (0)
	in (mm) in (mm) Ibs (kg) Ibs (kg) in (mm)

Horizontal Wind Resistance	5.03lb@100mph		
Temperature range	°F (°C)	-40 to +140 (-40 to +60)	
Wind Loading Area (Flat Plate Equivalent)	ft² (m²)	0.02 (0)	

SM	600D	(WI-G	ips)
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Cell/LTE-1	GPS	WiFi	Cell/LTE-2

Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
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