



## Semtech Antenna – 8-in-1 Dome

The 8-in-1 Dome is a custom single antenna solution for the MG90 5G 4x4, tested and certified for mobile applications.

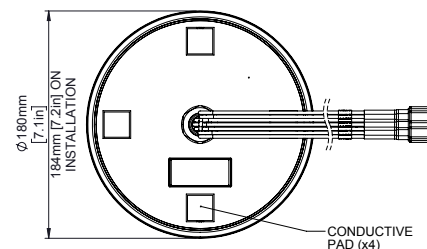
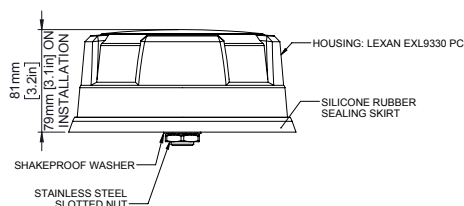
The antenna has a low-profile design that contains eight isolated high-performance antenna elements in a single housing for optimal coverage; four ultra-wideband elements spanning 617-6000MHz; a high performance GNSS antenna with an integrated 26dB gain LNA; and 3x3 MIMO dual band 2.4/5GHz Wi-Fi elements..

		Specification	
PART NO.		6001344 (Black)/6001345 (White)	
ELECTRICAL DATA			
Frequency Range	4G/5G Elements	617-960MHz / 1710-6000MHz	
	Wi-Fi Elements	2.4/4.9-6GHz	
Peak gain: Isotropic*	4G/5G Elements	617-960MHz	4dBi
		1710-3800MHz	6dBi
		4900-6000MHz	6dBi
	Wi-Fi Elements	2.4 GHz	5dBi
		4.9-6.0GHz	7dBi
Isolation*	4G/5G Elements	> 10dBm	
	Wi-Fi Elements	> 12dBm	
Typical Efficiency	4G/5G Elements	617-960MHz	>50%
		1710-3800MHz	>60%
		4900-6000MHz	>35%
	Wi-Fi Elements	2.4GHz	>60%
		5.0GHz	>45%
Correlation Co-efficient	4G/5G Elements	<0.2	
Pattern	Omni-directional		
Impedance	50Ω		

\*Simulated off a groundplane and does not include cable attenuation

# DATASHEET – Antenna 8-in-1 Dome

		Specification
<b>GPS/GNSS DATA</b>		
Frequency Range		1562-1612MHz
VSWR		<2.1 ± 4MHz
Gain: LNA		26dB
Out of Band Rejection		> 35dB
Rejection at 787MHz		> 50dB
Typical Noise Figure		-2.7dB
Operating Voltage		3-5V DC
Typical Current		15mA
<b>MECHANICAL DATA</b>		
Dimensions	Height	80mm (3.1")
	Diameter	180mm (7.1")
Operating Temp		-40° / +80°C (-40° / +176°F)
Colour		Black/White
Ingress Protection		IP69K
<b>MOUNTING DATA</b>		
Mounting Type		Bolt Mount
Mounting Hole		19mm (3/4")
<b>CABLE DATA</b>		
Cell / LTE Cables	Type	C32
	Length	5m (16')
	Termination	SMA (m)
GPS Cable	Type	CS29
	Length	5m (16')
	Termination	SMA (m)
Wi-Fi Cables	Type	C32
	Length	5m (16')
	Termination	RP-SMA



## About Semtech

Semtech Corporation (Nasdaq: SMTC) is a high-performance semiconductor, IoT systems and cloud connectivity service provider dedicated to delivering high-quality technology solutions that enable a smarter, more connected and sustainable planet. Our global teams are committed to empowering solution architects and application developers to develop breakthrough products for the infrastructure, industrial and consumer markets.

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