Best-in-Class, End-to-End Connectivity Solutions for Fixed and Mobile Applications

Semtech Antennas

Accelerate your deployment with always-on, end-to-end connectivity provided by our portfolio of high performance Semtech Antennas. Tested and certified to provide optimal performance with all AirLink routers and gateways, Semtech offers an extensive portfolio of antennas—designed to connect a wide range of mobile and fixed applications in public safety, utilities, industrial and distributed enterprises.

WHY SEMTECH ANTENNAS?

- Carefully matched to seamlessly integrate with AirLink Routers and Gateways
- Tested and certified to meet regulatory standards, ensuring reliable, high-performance connectivity
- Streamlined product sourcing and ordering for enhanced simplicity
- Serviced and supported by Semtech, with 3-year warranty

Dual Sharkfin

The Dual Sharkfin is an advanced antenna system, combining 4G/5G, GPS/GNSS, and WiFi functionalities in a sleek sharkfin-shaped enclosure. Designed for peak performance, it enables 4×4 MiMo antenna function for 4G/5G (617-6000MHz), includes a high-performance GNSS antenna with an integrated 26dB gain LNA, and supports up to five dual-band 2.4/5GHz Wi-Fi connections

This design is ideal for public safety and transport applications. Its innovative design requires only a single hole for mounting, minimizing vehicle damage and visual disruption.

VARIANT	Supported Technologies	Part Number	Recommended AirLink Routers/Gateway
10-in-1 Dual Sharkfin	4 x 5G/LTE 617-6000MHz + GNSS L1 + 5 x Wi-Fi 2.4/5GHz	6001444 (Black) 6001500 (White)	XR80
9-in-1 Dual Sharkfin	4 x 5G/LTE 617-6000MHz + GNSS L1 + 4 x Wi-Fi 2.4/5GHz	6001442 (Black) 6001501 (White)	XR90
7-in-1 Dual Sharkfin	4 x 5G/LTE 617-6000MHz + GNSS L1/L5 + 2 x Wi-Fi 2.4/5GHz	6001511 (Black) 6001525 (White)	XR60
5-in-1 Dual Sharkfin	4 x 5G/LTE 617-6000MHz + GNSS L1	6001446 (Black) 6001524 (White)	XR80, XR90
5-in-1 Dual Sharkfin	4 x 5G/LTE 617-6000MHz + GNSS L1/L5 + 5 x Wi-Fi 2.4/5GHz	6001512 (Black) 6001526 (White)	XR60
Mag Mount	Magnetic mounting without drilling a hole; Available for trial and demos	6001505	All Dual Sharkfin antennas
Rib Adapter Mounting Kit	Mounting solution designed for ribbed roof panels, for (2021 and newer) Ford Explorer/Interceptor	6001506	All Dual Sharkfin antennas

SharkFin

The SharkFin antennas have a compact OEM style housing that contain up to six high performance antenna elements for a variety of antenna solutions—2x2 MiMo antenna elements function for 2G, 3G, and 4G LTE frequencies, and an active antenna for GNSS with 26dB gain LNA and dual band 3x3 MiMo Wi-Fi (2.4/5GHz).

	Supported Technologies	Part Number	Recommended AirLink Routers/Gateway
VARIANT			
6-in-1 Sharkfin	2 x LTE 698-3800 MHz (MiMo) + GNSS + 3 x Wi-Fi 2.4/5GHz (MiMo)	6001197 (Black) 6001262 (White)	MG90, MP70
4-in-1 Sharkfin	2 x LTE 698-3800MHz (MiMo) + GNSS + 1 x Wi-Fi 2.4/5GHz	6001530	LX60, RV55
3-in-1 Sharkfin	2 x LTE 698-3800MHz (MiMo) + GNSS	6001119	MP70, RV55, RV50X
3-in-1 Sharkfin WiFi	3 x 3 MiMo Wi-Fi 2.4/5GHz	6001199	MG90, MP70
2-in-1 Sharkfin	2 x LTE 698-3800MHz (MiMo)	6001120	MG90 (Second Radio), LX60
Mag Mount	Magnetic mounting without drilling a hole; Available for trial and demos	6001112	All Sharkfin antennas

Dome

The Dome Antennas are high performance, rugged, ground plane independent MiMo antennas. They have low profile design that contains up to ten isolated high performance antenna elements in a single housing for optimal coverage—four ultra-wideband elements spanning 617-6000MHz support MiMo/diversity at LTE/5G frequencies; a high performance GNSS antenna with an integrated 26dB gain LNA, and up to five dualband 2.4/5GHz Wi-Fi elements that provide reliable MiMo Wi-Fi connectivity.

The Dome antennas are ideal for heavy-duty public safety, transit and industrial installations, with a simple single bolt mounting.

	Supported Technologies	Part Number	Recommended AirLink Routers/Gateway
VARIANT			
10-in-1 Dome	4 x 5G/LTE 617-6000MHz (MiMo) + GNSS + 5 x Wi-Fi 2.4/5GHz (MiMo)	6001354 (White) 6001355 (Black)	XR80
9-in-1 Dome	4 x 5G/LTE 617-6000MHz (MiMo) + GNSS + 4 x Wi-Fi 2.4/5GHz (MiMo)	6001399 (Black) 6001400 (White)	XR90
8-in-1 Dome	4 x 5G/LTE 617-6000MHz (MiMo) + GNSS + 3 x Wi-Fi 2.4/5GHz (MiMo)	6001345 (White) 6001344 (Black)	MG90 5G 4x4
6-in-1 Dome	2 x 5G/LTE 617-6000MHz (MiMo) + GNSS + 3 x Wi-Fi 2.4/5GHz (MiMo)	6001363 (White) 6001364 (Black)	MG90, MP70
5-in-1 Dome	4 x 5G/LTE 617-6000MHz (MiMo) + GNSS	6001443 (Black) 6001445 (White)	XR80, XR90
5-in-1 Dome	2 x LTE 617-6000MHz (MiMo) + GNSS + (1+1)Wi-Fi 2.4/5GHz	6001275 (Black)	RX55 Dual WiFi RV55 Dual WiFi
Mag Mount	Magnetic mounting without drilling a hole; Available for trial and demos	6001113	All Dome antennas

Wi-Fi

With up to four omni-directional dual band Wi-Fi elements in a single housing, the Wi-Fi antennas are IP69K certified built for internal/external Wi-Fi applications. Each element is isolated from the other with a separate feed and covers both the 2.4GHz and 5GHz bands. The 3-In-1 and 4-in-1 Wi-Fi is easy to install and is supplied with 4m low loss cables.

	Supported Technologies	Part Number	Recommended AirLink Routers/Gateway
VARIANT			
4-in-1 Wi-Fi	4 x Wi-Fi 2.4/5GHz (MiMo)	6001351 (Black) 6001352 (White)	XR90
3-in-1 Wi-Fi	3 x Wi-Fi 2.4/5GHz (MiMo)	6001283 (Black) 6001284 (White)	MG90, MP70

BAT

Efficient element design that assures high performance and robust communication link, BAT antenna is purposely designed for high-speed telematics applications that can be mounted on any non conductive surface. The isolated dual 4G/3G/5G antenna elements cover 617-6000MHz and GNSS with the option for dual-band Wi-Fi.

	Supported Technologies	Part Number	Recommended AirLink Routers/Gateway
VARIANT			
4-in-1	2 x 5G/LTE 617-6000MHz (MiMo) + GNSS + 1 x Wi-Fi 2.4/5GHz	6001201	RX55, RV55, LX60, LX40
3-in-1	2 x 5G/LTE 617-6000MHz (MiMo) + GNSS	6001200	MP70, RX55, RV55, RV50X

Industrial/IOT

The Industrial MiMo antenna offers a tailored solution for industrial and IoT applications and is certified to work with Airlink routers. Encased in a sturdy, low-profile housing, it features four 5G/4G elements spanning 617-4200MHz and an L1/L5 GPS/GNSS antenna. Additionally, the Wi-Fi variant supports dual-band 2.4/5GHz connections, accommodating up to two connections.

Constructed from durable, flame-retardant, impact-resistant plastic, this antenna is well-suited for tough environments and public installations. Its sleek, curved design enhances resistance to vandalism. The housing is UV resistant and certified for IP69K ingress protection. The antenna is supplied with integrated, low-loss flame-retardant cables approved to UN ECE R118 standards.

	Supported Technologies	Part Number	Recommended AirLink Routers/Gateway
VARIANT			
7-in-1 Industrial	4 x 5G/LTE 617-4200MHz (MIMO) + GNSS L1/L5 + 2 x Wi-Fi 2.4/5GHz (MIMO)	6001517 (Black)	XR60
5-in-1 Industrial	4 x 5G/LTE 617-4200MHz (MIMO) + GNSS L1/L5	6001518 (Black)	XR60

Panel

The Panel antenna comes in a compact, robust low profile housing that contains up to four antenna elements covering all current global cellular and LTE bands in frequency range 698-3800MHz and active GNSS antenna. With a single bolt mount and versatile bracket, it provides ideal solution for a variety of fixed mounted applications.

The Flat Panel delivers powerful MIMO antenna technology for LTE and Sub-6GHz 5G bands covering 617 – 6000MHz. These can be easily mounted using adhesive for both fixed and mobile applications. It can be installed internally in vehicles for covert or testing usage.

	Supported Technologies	Part Number	Recommended AirLink Routers/Gateway
VARIANT			
5-in-1 Flat Panel	4 x 5G/LTE 617-6000MHz (MiMo) + GNSS	6001432(3m)	XR80, XR90
5-in-1Panel	2 x 5G/LTE 617-6000MHz (MiMo) + GNSS + 2 x Wi-Fi 2.4/5GHz	6001455(2m)	RX55, RV55
3-in-1Panel	2 x 5G/LTE 617-6000MHz (MiMo) + GNSS	6001454(2m)	RX55
3-in-1 Panel	2 x LTE 698-3800MHz (MiMo) + GNSS	6001125 (3m) 6001211 (1m)	MP70, RV55, RV50X, LX60
2-in-1 Panel	2 x LTE 698-3800MHz (MiMo)	6001124 (3m) 6001219 (1m)	RV55, LX60, LX40, RV50X

Paddle

Paddle antennas are ground plane independent antennas designed with an articulated connector for flexible positioning of 0-90° pivot and a sleek ruggedized profile for durability.

	Supported Technologies	Part Number	Recommended AirLink Routers/Gateway
VARIANT			
Paddle 5G	5G/4G 698-6000MHz	6001343	MG90 5G, RX55
Paddle Cell	LTE 698-3800MHz	6001110	MG90, MP70, LX60, LX40, RV55, RV50X
Paddle Wi-Fi	Wi-Fi 2.4/5GHz, Bluetooth	6001111	MG90, MP70, RX55, RV55, LX60, LX40
Stubby WiFi	Wi-Fi 2.4/5GHz	6001430	XR80, XR90
Paddle LPWA (2m cable)	LTE 698-2700MHz	6001401	XR80, XR90

Reference Table

	Cable Length (m)	Part Number	XR80/XR90	XR60	MG	MP	RX	RV	LX
MOBILE ANTENNA									
10-in-1 Dome	5	6001354 (B) 6001355 (W)	●						
10-in-1 Dual Sharkfin	4	6001444 (B) 6001500 (W)	●						
9-in-1 Dome	5	6001399 (B) 6001400 (W)	●						
9-in-1 Dual Sharkfin	4	6001442 (B) 6001501 (W)	●						
8-in-1 Dome	5	6001344 (B) 6001345 (W)			●				
7-in-1 Dual Sharkfin	4			●					
6-in-1 SharkFin	4	6001197 (B) 6001262 (W)			●	●			
6-in-1 Dome	5	6001363 (W) 6001364 (B)			●	●			
5-in-1 Dome	5	6001443 (B) 6001445 (W)	●						
5-in-1 Dome	5	6001275					●	●	
5-in-1 Dual Sharkfin	4	6001446 (B) 6001524 (W)	●						
5-in-1 Dual Sharkfin	4	6001512 (B) 6001526 (W)		●					
4-in-1 SharkFin	4	6001530							●
4-in-1 Wi-Fi	4	6001351 (B) 6001352 (W)	●						
3-in-1 SharkFin	4	6001119			●	●		●	
3-in-1 SharkFin Wi-Fi	4	6001199			●	●			
3-in-1 Wi-Fi	4	6001283 (B) 6001284 (W)			●	●			
2-in-1 SharkFin	4	6001120			●	●		●	●
4-in-1 BAT	3	6001201					●		●
3-in-1 BAT	3	6001200	●			●	●		
FIXED ANTENNA									
5-in-1 Flat Panel	2	6001432	●						
7-in-1 Industrial	2	6001517		●					
5-in-1 Industrial	2	6001518		●					
5-in-1 Panel	2	6001455					●	●	
4-in-1 Panel	2	6001285						●	●
3-in-1 Panel	3 2 1	6001125 6001454 6001211				●	●	●	
2-in-1 Panel	3 1	6001124 6001219						●	●
Stubby Wi-Fi	NA	6001430	●						
Paddle Wi-Fi	NA	6001111	●		●	●	●	●	●
Paddle 5G	NA	6001343			●				
Paddle Cellular	NA	6001110			●	●		●	●

Reference Table

	Cable Length (m)	Part Number	XR80/XR90	XR60	MG	MP	RX	RV	LX
ACCESSORIES									
Dual Sharkfin Mag Mount Adaptor	NA	6001505	●	●					
Dual Sharkfin Rib Roof Adapter for (2021 and newer) Ford Explorer/ Interceptor	NA	6001506	●	●					
SharkFin Magnetic Mount Adapter	NA	6001112			●	●		●	●
Dome Magnetic Mount Adapter	NA	6001113	●		●	●	●	●	

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.

To learn more about Semtech technology, visit us at **Semtech.com** or follow us on **LinkedIn** or **X.**

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