

Ready to Use External Antennas

molex

Bluetooth/Wi-Fi Flexible

- 215868 - 2.4/5.8 GHz On-metal Antenna
- 215872 - 2.4/5/6 GHz Mini-Link Tri-band Antenna
- 212860 - 2.4/5 GHz Dual Band Hinged Antenna
- 214415 - 2.4 GHz Single Band Hinged Antenna
- 214386 - 2.4/5 GHz Dual Band U.FL Antenna
- 214428 - 5.0 GHz Single Band U.FL Antenna
- 214394 - 2.4/5 GHz 2x2 MIMO Antenna
- 214389 - 2.4/5 GHz High-Gain Antenna

ISM/DSRC Antennas

- 214414 - 5.8-6 GHz Hinged Antenna
- 214390 - 5.8-6 GHz High-Gain Antenna
- 214048 - 5.8-6 GHz 2x2 MIMO Antenna
- 216196 - 868/915 MHz LoRa Antenna

GNSS Antennas

- 213499 - 1561/1575/1602 MHz Magnetic Mount GNSS Antenna

Cellular Antennas

- 213523 - LTE Hinged Antenna
- 214429 - 5G Hinged Antenna

Combo Antennas

- 211297 - 2-in-1 4G/GPS Antenna
- 206866 - 3-in-1 (4G/Wi-Fi/GPS) Antenna
- 213500 - LTE/GPS Screw Mount Antenna
- 216589 - 2.4/5/6 GHz and 1575 MHz Multi-Hub 5-in-1 Antenna




Bluetooth/Wi-Fi External Antennas



BLUETOOTH/WI-FI EXTERNAL ANTENNAS

Series	215868	215872	212860	214415	214386	214428	214394	214389
Key features	Low profile, excellent performance on metal surface	Small size antenna with excellent performance	General market product with good performance, flexibility and robustness				2x2 MIMO	High gain, firm structure for outdoor applications
Size (mm)	44.00 by 37.00 by 8.50	35.00 or 30.00 by 8.00	108.40 by 9.35		104.00 by 9.40		77.00 by 15.00	275.00 by 23.00
Form factor	Low brick	Short stick	Whip-hinged	Whip-hinged	Whip-hinged-cable	Whip-hinged-cable	Hockey ball	Glass fiber reinforce plastic
Frequency (GHz)	2.4 / 5.8	2.4 to 2.5 5.0 to 5.9 5.9 to 7.0	2.4 / 5.0	2.4	2.4 / 5.0	5	2.4 / 5.0	2.4 / 5.0
Return Loss (dB)	<-6	<-10 / <-5 / <-3	<-10	<-10	<-10	<-8	<-10	<-10
Peak gain (dBi)	1.8 / 5.5	3.4 / 6.0 / 4.5	5.3 / 4.5	5.3	5.2 / 3.3	3.1	Port 1: 2.5 / 2.6 Port 2: 3.1 / 3.4	5.0 / 6.0
Efficiency	>50% >45%	>60% >60% >45%	>80% >75%	>80%	>80% >65%	>75%	>65% >47.5%	>85% >80%
Product image								

ISM/DSRC EXTERNAL ANTENNAS

Series	214414	214390	214048	216196
Key features	General market product with good performance, flexibility and robustness	High gain, firm structure for outdoor applications	2x2 MIMO	General market product with good performance, flexibility and robustness
Size (mm)	108.40 by 9.35	275.00 by 23.00	75.00 by 14.90	13.00 by 196.00
Form factor	Whip-hinged	Glass fiber-reinforce plastic	Hockey ball	Whip-hinged
Frequency (GHz)	5.9	5.9	5.9	866±10MHz / 915±10 MHz
Return Loss (dB)	<-10	<-8	<-10	<-15 / <-8
Peak gain (dBi)	3.9	8.4	-1.0 / -1.8	2.5 / 1.7
Efficiency	>75%	>75%	>10% (with cable loss)	>75% / >70%
Product image				

GNSS EXTERNAL ANTENNAS	
Series	213499
Key features	Active antenna with amplifier circuit
Size (mm)	55.00 by 47.00 by 16.70 (with 3.0m long cable)
Form factor	Small brick
Frequency (MHz)	1561.098±2.046 / 1575.42±1.023 / 1602±4
Return Loss (dB)	<-10
Peak gain (dBi)	28.0±3.0
Efficiency	>20% / >30% / >25%
Product image	

Cellular External Antennas



CELLULAR EXTERNAL ANTENNAS

Series	213523	214429
Key features	General market product with good performance, flexibility and robustness. Wide LTE bands.	General market product with good performance, flexibility and robustness. Wide 5G/LTE bands.
Size (mm)	171.50 by 19.40 mm (Straight mode)	171.50 by 19.40 mm (Straight mode)
Form factor	Bar-hinged	Bar-hinged
Frequency	698 to 960 MHz / 1710 to 2690 MHz	698 to 960 MHz / 1.5 to 3 GHz / 3 to 5 GHz
Return Loss (dB)	<-5 / <-10	<-5 / <-10 / <-5
Peak gain (dBi)	2.3 / 4.8	1.6 / 5.5 / 3.6
Efficiency	>55% / >70%	>55% / >70% / >60% / >55%
Product image		

Combo External Antennas



COMBO EXTERNAL ANTENNAS

Series	211297	206866	213500	216589 (ECD Q4 2020)
Key features	2-in-1 antenna including LTE and GPS, adhesive mount	3-in-1 antenna including LTE, Wi-Fi and GPS, adhesive mount	2-in-1 antenna including LTE and GPS, Screw nut mount	5-in-1 antenna including 5G 2*2 MIMO, Wi-Fi 2*2 MIMO and GPS
Size (mm)	77.00 by 15.00	77.00 by 15.00	75.00 by 14.90	155.00 by 65.00 by 20.00
Form factor	Hockey ball	Hockey ball	Hockey ball, Screw-nut	Brick
Frequency	Cellular: 824 to 960 MHz /1710 to 2690 MHz GPS: 1575.42±1.023 MHz	Cellular: 824 to 960 MHz /1710 to 2690 MHz GPS: 1575.42±1.023 MHz Wi-Fi: 2.4 GHz	Cellular: 824 to 960 MHz /1710 to 2690 MHz GPS: 1575.42±1.023 MHz	Cellular: 698 to 960 MHz /1710 to 5000 MHz GPS: 1575.42±1.023 MHz Wi-Fi: 2.4/5.8 GHz
Return Loss (dB)	<-8 / -10	< -6 / < -10	<-5 / <-10	<-5
Peak gain (dBi)	-0.8 @824 MHz, -2.1 @1561 MHz, -2.1 @1575 MHz, 0.4 @1710 MHz	-0.5 @824 MHz, -2.7 @2.4 GHz, 0 @1710 MHz, 3.0 @1575 MHz	0.77 @824 MHz, 3.73 @1710 MHz	2.0 to 3.9 @Cellular 3.3 to 3.4 @Wi-Fi 0 to 1.2 @GPS
Efficiency	22.1% @1575 MHz, 22.3% @1561 MHz, 26.8% @1710 MHz, 33.6% @824 MHz	21.6% @824 MHz, 23.3% @2.4 GHz, 26.2% @1575 MHz, 27.2% @1710 MHz	55% @824 MHz, 60% @1710 MHz	40% to 65% @Cellular 50% to 60% @Wi-Fi 45% to 50% @GPS
Product Image				

www.molex.com/cm/readytouseantenna.html