



Build a Smarter World

# Quectel Antennas

Without an antenna it can't be wireless!

For more information contact  
us at [www.quectel.com](http://www.quectel.com)

# Quectel Antenna Services



## Consulting & Evaluation

- Feasibility & Architecture Study
- Risk Identification
- Initial Proof of Concept
- Antenna Component Selection



## Design

- Antenna Placement
- Antenna Layout Design
- RF Specification Design
- Antenna System Design & Optimization
- Gerber File Review



## Testing & Certification

- Antenna OTA Testing
- Interference Mitigation
- Support for CE/FCC/PTCRB Radio Approval
- Pre-certification OTA Testing for 2G/3G/4G/5G

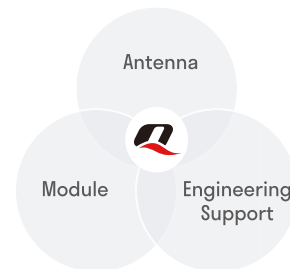


## Manufacturing

- Antenna Samples
- Tooling & Molding
- Assembly and Production Testing
- Delivery

# Quectel Advantages

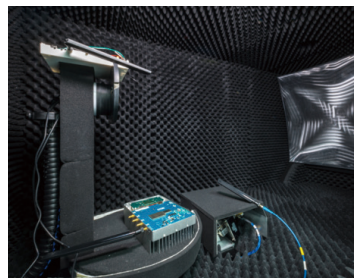
- Solutions for the Entire Wireless RF Front End
- Complete RF Antenna Testing Services
- Global One Stop Engineering Support
- Vertical Integration of Antenna Resources
- Approved for Use with Quectel Modules



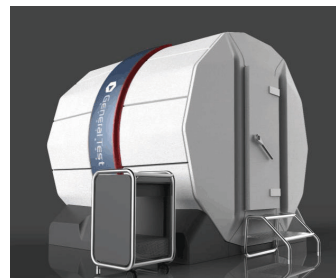
# Instruments



5G OTA System



mmWave 5G Chamber



5G(Sub-6G) Chamber Ray Zone 2800



5G VNA

# Quectel Antennas

## 5G Antennas

Product	YE0001BA	YE0003AA	YE0007AA	YE0025AA
				
Frequency Bands (MHz)	600–6000	699–5000	600–6000	698–960,1710–5000
Technology	5G	5G	5G	5G
Cable Length (mm)	n/a	n/a	n/a	n/a
Connector Type	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)
Mounting Type	Terminal	Terminal	Terminal	Terminal
Dimensions (mm)	221 × 26.95 × 13.5	190 × Ø 16	152.4 × 21.79 × 14.49	199 × 22
Matched Quectel Modules	5G/4G/3G/2G/LPWA			

## 5G Antennas

Product	YE0027AA	YE0028AA	YE0037AA	YXH001AA
				
Frequency Bands (MHz)	699–5000	700–2700, 3300–5000	700–5000	700–960, 1710–2690, 3300–5000
Technology	5G	5G	5G	5G
Cable Length (mm)	3000 (RG58)	1500	1000	1000 (RG195)
Connector Type	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)
Mounting Type	Magnetic	Magnetic	Magnetic	Magnetic
Dimensions (mm)	221 × Ø 61	234 × Ø 60, 1.5 DS	88 × Ø 30, LMR100	285 × 45
Matched Quectel Modules	5G/4G/3G/2G/LPWA			



The parameters shall be subject to the Specification.

# Quectel Antennas

## 5G Antennas

Product	YF0002AA	YF0002BA	YF0002CA	YF0002DA
				
Frequency Bands (MHz)	700-960, 1710-2700, 3300-5000	1710-2700, 3300-5000	1710-2700, 3300-5000	700-960, 1710-2700, 3300-5000
Technology	5G	5G	5G	5G
Cable Length (mm)	n/a	n/a	n/a	n/a
Connector Type	Spring contact	Spring contact	Spring contact	Spring contact
Mounting Type	Screw	Screw	Screw	Screw
Dimensions (mm)	60.1 × 12.25 × 10.1	41.25 × 10.1 × 10.1	37.25 × 9.6 × 10.1	50.25 × 20.1 × 10.1
Matched Quectel Modules	5G/4G/3G/2G/LPWA			



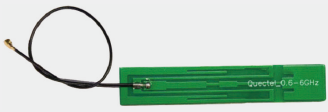
## 5G Antennas

Product	YF0017AA	YF0017BA	YF0020AA	YC0018AA
				
Frequency Bands (MHz)	1500-6000	1100-6000	600-6000	698-960, 1176-1280, 1400-1610, 1710-2170, 2170-2690, 3300-4000, 4000-5000, 5000-6000
Technology	5G	5G	5G	5G
Cable Length (mm)	193 ±3	193 ±3	184 ±3	n/a
Connector Type	IPEX IV	IPEX IV	IPEX IV	n/a
Mounting Type	Adhesive	Adhesive	Adhesive	SMD
Dimensions (mm)	49 × 13 × 0.13	49 × 13 × 0.13	90.15 × 15.2 × 0.13	40 × 7 × 3
Matched Quectel Modules	5G/4G/3G/2G/LPWA			

The parameters shall be subject to the Specification.

# Quectel Antennas

## 5G Antennas

Product	YP0009AA	YP0009BA	YP0009CA
			
Frequency Bands (MHz)	1500-6000	1100-6000	600-6000
Technology	5G	5G	5G
Cable Length (mm)	193 ±3	193 ±3	188 ±3
Connector Type	IPEX IV	IPEX IV	IPEX IV
Mounting Type	Adhesive	Adhesive	Adhesive
Dimensions (mm)	49 × 13 × 0.85	49 × 13 × 0.85	78.5 × 14.2 × 0.85
Matched Quectel Modules	5G/4G/3G/2G/LPWA		







## LTE (4G) Antennas

Product	YC0003AA	YC0001AA	YC0017BA	YC0002AA
				
Frequency Bands (MHz)	698-960, 1695-2200, 2300-2700	698-960, 1710-2690	698-960, 1710-3800	698-960, 1710-2690
Technology	LTE (4G)	LTE (4G)	LTE (4G)	LTE (4G)
Cable Length (mm)	n/a	n/a	n/a	n/a
Connector Type	n/a	n/a	n/a	n/a
Mounting Type	SMD	SMD	SMD	SMD
Dimensions (mm)	40 × 7 × 3	35.0 × 8.5 × 3.0	26 × 8 × 3	42 × 10 × 3
Matched Quectel Modules	4G/3G/2G/LPWA			

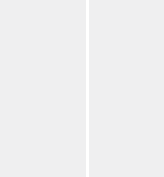


The parameters shall be subject to the Specification.

# Quectel Antennas

## LTE (4G) Antennas

Product	YF0022AA	YF0007BA	YFCA002AA	YF0006AA	YF0006DA	YF0028AA
						
Frequency Bands (MHz)	700~2690	600-960, 1427.9-1495.9, 1710-2170, 2300-2700	700~2690	690-960, 1710-2170, 2300-2690	690-960, 1710-2170, 2300-2690	698-3000
Technology	LTE (4G)	LTE (4G)	LTE (4G)	LTE (4G)	LTE (4G)	LTE (4G)
Cable Length (mm)	75 ±3	75 ±3	75 ±3	30 ±3	75±3	150 ±2
Connector Type	RF1	RF1	RF1	U.FL Generation I	IPEX I	IPEX I
Mounting Type	Adhesive	Adhesive	Adhesive	Adhesive	Adhesive	Adhesive
Dimensions (mm)	40 × 15 × 1.6	50 × 25 × 0.85	30 × 20 × 0.13	50 × 25 × 0.13	50 × 25 × 0.13	96 × 21 × 0.2
Matched Quectel Modules	4G/3G/2G/LPWA					

## LTE (4G) Antennas

Product	YECT002AA	YECT003AA	YE0009AA	YCNO01AA
				
Frequency Bands (MHz)	700-960,1710-2690	698-960, 1710-2700	824-2700	700-2700
Technology	LTE (4G)	LTE (4G)	LTE (4G)	LTE (4G)
Cable Length (mm)	n/a	n/a	n/a	n/a
Connector Type	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)
Mounting Type	Terminal	Terminal	Terminal	Terminal
Dimensions (mm)	196.2 × 16 × 13	113× Ø 10	190 × 16	144 × Ø 13
Matched Quectel Modules	4G/3G/2G/LPWA			

The parameters shall be subject to the Specification.

# Quectel Antennas

## LTE (4G) Antennas

Product	YE0006AA	YE0010AA	YB0010AA	YB0016AA	YE0012AA	YE0021AA	YE0029AA
							
Frequency Bands (MHz)	700-2700	698-2700	698-960, 1710-2690	698-960, 1710-2700	824-960, 1710-2690	690-960, 1710-2690	700-2700
Technology	LTE (4G)	LTE (4G)	LTE (4G)	LTE (4G)	LTE (4G)	LTE (4G)	LTE (4G)
Cable Length (mm)	1500	1000 ±30	2000 ±30	3000 ±50 (LMR200)	250 ±10	1500 ±30	3000 ±50 (LMR100)
Connector Type	SMA Male (center pin)	SMA Male (center pin)	SMA Male	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)
Mounting Type	Magnetic	Adhesive	Magnetic	Screw	Adhesive	Magnetic	Magnetic
Dimensions (mm)	318 × Φ 30, RG174	152 × 18 × 5.9	Φ 84 × 81.5 × 16	54 × 91	116.5 × 21.7 × 5.6	112 × 29.8	88 × Φ 30
Matched Quectel Modules	4G/3G/2G/LPWA						

## LTE (4G) Antennas

Product	YDX001AA	YE0002AA	YE0013AA	YGL001AA
				
Frequency Bands (MHz)	824-2690	699-2700	700-2700	700-960, 1710-2690
Technology	LTE (4G)	LTE (4G)	LTE (4G)	LTE (4G)
Cable Length (mm)	n/a	n/a	n/a	n/a
Connector Type	SMA Male (center pin)	RP-SMA Male (center receptacle)	SMA Male (center pin)	SMA Male (center pin)
Mounting Type	Terminal	Terminal	Terminal	Terminal
Dimensions (mm)	208 × Φ 12	174.6 × 19.2	115.4 × 17.5 × Φ 10.2	196.2 × 16 × 13
Matched Quectel Modules	4G/3G/2G/LPWA			

The parameters shall be subject to the Specification.

# Quectel Antennas

## LPWA/3G/2G Antennas

Product	YE0008AA	YE0011AA	YK001CA
			
Frequency Bands (MHz)	824-960, 1710-2170	824-960, 1710-2170	NB: 800-1000, 1700-1900
Technology	2G/3G/NB-IoT	2G/3G/NB-IoT	3G/NB-IoT/2G
Cable Length (mm)	n/a	n/a	310 ±10
Connector Type	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)
Mounting Type	Terminal	Terminal	Screw
Dimensions (mm)	52 × Ø 10	50 × Ø 10	50 × 48
Matched Quectel Modules	LPWA/3G/2G module series		

## GPS/GNSS Antennas

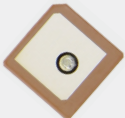

Product	YC0013AA	YCGA001AA	YCGA002AA	YG0038AA
				
Frequency Bands (MHz)	1559-1606	1559-1606	1559-1606	1559-1606
Technology	GNSS	GNSS L1	GNSS L1	GNSS L1
Cable Length (mm)	n/a	n/a	n/a	n/a
Connector Type	n/a	n/a	n/a	n/a
Mounting Type	SMD	Pin Mounting	Pin Mounting	Pin Mounting
Dimensions (mm)	3.2 × 1.6 × 0.6	10 × 10 × 4	12 × 12 × 4	13 × 13 × 4
Matched Quectel Modules	GNSS L1 module series			

The parameters shall be subject to the Specification.




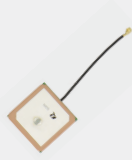


# Quectel Antennas

## GPS/GNSS Antennas

Product	YG0043AA	YG0046AA	YG005AA	YG0062AA
				
Frequency Bands (MHz)	1559-1606	1559-1606	1559-1606	1559-1606
Technology	GNSS L1	GNSS L1	GNSS L1	GNSS L1
Cable Length (mm)	n/a	n/a	n/a	n/a
Connector Type	n/a	n/a	n/a	n/a
Mounting Type	Pin Mounting	Pin Mounting	Pin Mounting	Pin Mounting
Dimensions (mm)	15 × 15 × 4	18 × 18 × 2	18 × 18 × 4	25 × 25 × 4
Matched Quectel Modules	GNSS L1 module series			





## GPS/GNSS Antennas

Product	YCGO004AA	YCGO005AA	YCGO006AA	YCGO007AA
				
Frequency Bands (MHz)	1559-1606	1559-1606	1559-1606	1559-1606
Technology	GNSS L1 (passive)	GNSS L1 (passive)	GNSS L1 (passive)	GNSS L1 (passive)
Cable Length (mm)	50±2	50±2	50±2	50±2
Connector Type	IPEX I	IPEX I	IPEX I	IPEX I
Mounting Type	Cable Mounting	Cable Mounting	Cable Mounting	Cable Mounting
Dimensions (mm)	10 × 10 × 6.5	15 × 15 × 6.5	18 × 18 × 6.5	25 × 25 × 6.5
Matched Quectel Modules	GNSS L1 module series			




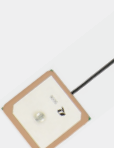
The parameters shall be subject to the Specification.

# Quectel Antennas

## GPS/GNSS Antennas

Product	YG0034AA	YG0021AA	YG0032AA	YG0015AA
				
Frequency Bands (MHz)	1559-1606	1560-1605 ( when covered with a radome on LNA ground plane )	Beidou: 1561 ±5 ; GPS: 1575 ±5	1559-1606
Technology	GNSS L1 (active)	GNSS L1 & B1 & G1 (active)	GNSS L1 & B1 & G1 (active)	GNSS L1 (active)
Cable Length (mm)	35±2	42 ±3	55	55 ±3
Connector Type	IPEX I	IPEX I	IPEX I	IPEX I
Mounting Type	Cable Mounting	Cable Mounting	Cable Mounting	Cable Mounting
Dimensions (mm)	13 × 13 × 6.8	18.4 × 18.4 × 8.86	18 × 18 × 6.6	25 × 25 × 8.25
Matched Quectel Modules	GNSS L1 module series			

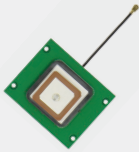
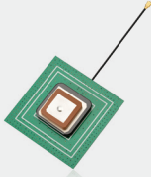


## GPS/GNSS Antennas

Product	YCGO008AA	YCGO009AA	YCGO010AA	YCGO011AA
				
Frequency Bands (MHz)	1559-1606	1559-1606	1559-1606	1559-1606
Technology	GNSS L1 (active)	GNSS L1 (active)	GNSS L1 (active)	GNSS L1 (active)
Cable Length (mm)	50±3	50±2	50±3	50±3
Connector Type	IPEX I	IPEX I	IPEX I	IPEX I
Mounting Type	Cable Mounting	Cable Mounting	Cable Mounting	Cable Mounting
Dimensions (mm)	10 × 10 × 6.5	15 × 15 × 6.5	18 × 18 × 6.5	25 × 25 × 6.5
Matched Quectel Modules	GNSS L1 module series			

The parameters shall be subject to the Specification.

# Quectel Antennas

## GPS/GNSS Antennas

Product	YAT001CA	YG0030AA	YC0008AA	YFGA001AA
				
Frequency Bands (MHz)	1176, 1575	1176, 1575	1173, 1575	1160-1270, 1560-1605
Technology	GNSS L1 & L5 (active)	GNSS L1 & L5 (passive)	GNSS L1 & L5 (passive)	GNSS L1 & 2 & L5 & L6
Cable Length (mm)	40 ±2	100 ±2	n/a	100
Connector Type	IPEX I	IPEX I	n/a	IPEX I
Mounting Type	Cable Mounting	Cable Mounting	SMD	Adhesive
Dimensions (mm)	25 × 25 × 2 & 18 × 18 × 4	52 × 52 × 9.9	30 × 5 × 5	74.56 × 24.5 × 0.25
Matched Quectel Modules	GNSS L1/L5 module series			

## GPS/GNSS Antennas

Product	YG0035AA	YLY001CA	YB0017AA	YG0028AA
				
Frequency Bands (MHz)	1561, 1575	1568 ±10	GPS L1/L5, BD B1/B2, GLONASS L1	1561-1602, 1166-1186
Technology	GNSS L1 & B1 & G1 (active)	GNSS L1 & B1 & G1 (active)	GNSS L1 & L5 (active)	GNSS L1 & L5 (active)
Cable Length (mm)	3000 ±20	2000	L = 3000	3000 (RG174)
Connector Type	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)
Mounting Type	Magnetic	Magnetic	Magnetic	Magnetic
Dimensions (mm)	50.3 × 38.4 × 17.1	45.5 × 38 × 13.5	61.5 × 56.5 × 23	∅ 54 × 38
Matched Quectel Modules	GNSS L1 module series		GNSS L1/L5 module series	

The parameters shall be subject to the Specification.

# Quectel Antennas

## WLAN/BT Antennas

Product	YC0009AA	YC0010AA	YC0011AA
			
Frequency Bands (MHz)	2400-2500	2400-2500	2400-2500, 5150-5850
Technology	Wi-Fi (Bluetooth)	Wi-Fi (Bluetooth)	Wi-Fi (Bluetooth)
Cable Length (mm)	n/a	n/a	n/a
Connector Type	n/a	n/a	n/a
Mounting Type	SMD	SMD	SMD
Dimensions (mm)	3.2 × 1.6 × 0.5	5.2 × 2.0 × 1.2	5.0 × 2.0 × 1.0
Matched Quectel Modules	FC30R/FC31R		All Wi-Fi/BT modules (Except Wi-Fi 6E)

## WLAN/BT Antennas

Product	YF0011AA	YF0026AA	YF0027AA	YF0029AA
				
Frequency Bands (MHz)	2400-2500, 5150-5850	2400-2500, 4900-5850, 5925-7125	2400-2500, 4900-5850, 5925-7125	2410-2490, 4920-5925
Technology	Wi-Fi (Bluetooth)	Wi-Fi (Bluetooth)	Wi-Fi (Bluetooth)	Wi-Fi (Bluetooth)
Cable Length (mm)	44 ±13	100 ±2	100 ±2	100 ±2
Connector Type	IPEX I (U.FL Generation I)	IPEX I (U.FL Generation I)	IPEX I (U.FL Generation I)	IPEX I (U.FL Generation I)
Mounting Type	Adhesive	Adhesive	Adhesive	Adhesive
Dimensions (mm)	38.9 × 9 × 0.12	28.9 × 11 × 0.2	42 × 7 × 0.2	30x30x0.25
Matched Quectel Modules	All Wi-Fi/BT modules (Except Wi-Fi 6E)	All Wi-Fi/BT modules		All Wi-Fi/BT modules (Except Wi-Fi 6E)

The parameters shall be subject to the Specification.

# Quectel Antennas

## WLAN/BT Antennas

Product	YE0031AA	YE0032AA	YE0038AA	YEW004AA	YEW001AA
					
Frequency Bands (MHz)	2.4–2.5 GHz, 5.15–5.85 GHz	2.4–2.5 GHz, 5.15–5.85 GHz	2400–2500, 5150–5850	2400–2500, 5150–7150	2400–2500, 5150–5850
Technology	Wi-Fi (Bluetooth)	Wi-Fi (Bluetooth)	Wi-Fi (Bluetooth)	Wi-Fi 6 (Bluetooth)	Wi-Fi 6 (Bluetooth)
Cable Length (mm)	n/a	n/a	n/a	n/a	n/a
Connector Type	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)
Mounting Type	Terminal	Terminal	Terminal	Terminal	Terminal
Dimensions (mm)	52 ±2	50 ±2	195 × 13	109 × Ø 10	200 × 13
Matched Quectel Modules	All Wi-Fi/BT modules (Except Wi-Fi 6E)			All Wi-Fi/BT modules	All Wi-Fi/BT modules (Except Wi-Fi 6E)

## Combo

Product	YB0007xx	YB0008AA	YB0009AA	YB0014AA
				
Frequency Bands (MHz)	700–960, 1710–2690, 3300–5000	4G MAIN: 698–960, 1710–2690; GNSS: 1575.42 ±5, 1561.098 ±5; 4G DIV: 1710–2690	4G: 824–960, 1710–2690; GPS, BD: 1575.42 ±10, 1561 ±10	LTE Main & Div: 698–960, 1700–2700; GNSS: 1561–1571; 1602–1606
Technology	5G	Main LTE & DIV LTE & GNSS	LTE & GNSS	LTE (4G)
Cable Length (mm)	500 ±30	300 ±10	310 ±10	3000 (RG174)
Connector Type	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)
Mounting Type	Screw	Adhesive	Screw	Screw
Dimensions (mm)	Ø 120 × 43	Ø 84 × 17.5	33 × 48	81 × 27.5
Matched Quectel Modules	5G/4G/3G/2G/LPWA	All 4G/3G/2G modules & GNSS L1 modules		

The parameters shall be subject to the Specification.

# Quectel Antennas

## Combo

Product	YB0015AA	YKLO01AA	YB0031AA
			
Frequency Bands (MHz)	LTE: 698-960, 1700-2700; Wi-Fi, BT: 2400-2500; GNSS: 1561 ±5, 1575 ±5	BT: 2400-2500; 4G: 824-960; 1710-2690; GPS,BD: 1575.42 ±10, 1561 ±10	LTE: 698-960; 1710-2690; GNSS: 1575.42 ±5, 1561.098 ±5
Technology	LTE/GPS & BD/Wi-Fi	LTE (4G)	LTE & GNSS
Cable Length (mm)	300 ±20 (RG174)	310 ±10	RG174 L=300
Connector Type	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)
Mounting Type	Screw	Screw	Adhesive
Dimensions (mm)	54 × 91	33 × 48	Φ 84 × 17.5
Matched Quectel Modules	4G/3G/2G modules & GNSS L1 modules & Wi-Fi modules		All 4G/3G/2G modules & GNSS L1 modules




## ISM

Product	YE0019AA	YE0039BA	YEIM001AA
			
Frequency Bands (MHz)	450-470	430-470, 790-960	465-475
Technology	ISM	ISM	ISM
Cable Length (mm)	/	75	2000(RG174)
Connector Type	SMA Male (center pin)	SMA Male (center pin)	SMA Male (center pin)
Mounting Type	Terminal	Adhesive	Magnet
Dimensions (mm)	109 × 10	117 × 21.81 × 5.47	Φ 30 × 131




The parameters shall be subject to the Specification.

# Quectel Antennas

## Cable Assembly

Product	YM0003AA	YM0003AB	YM0013AA
			
External/Patch/Embedded	Embedded	Embedded	Embedded
Frequency Bands (MHz)	0-6000	0-6000	0-6000
Technology	LTE(4G)	LTE(4G)	LTE(4G)
Form Factor	Cable assembly	Cable assembly	Cable assembly
Cable Length (mm)	100	200	300
Connector Type	SMA-female to IPEX I	RP-SMA-female to IPEX I	SMA-female to IPEX I
Mounting Type	Screw	Screw	Screw
Dimensions (mm)	100	200	300
Matched Quectel Modules	All modules (5G excluded)		

## Cable Assembly

Product	YM0004AA	YM0005AA	YSAN001AA
			
External/Patch/Embedded	Embedded	Embedded	Embedded
Frequency Bands (MHz)	0-6000	0-6000	0-6000
Technology	5G	5G	5G
Form Factor	Cable assembly	Cable assembly	Cable assembly
Cable Length (mm)	100	150	300
Connector Type	SMA-female to IPEX IV	SMA-female to IPEX IV	SMA-female to IPEX IV
Mounting Type	Screw	Screw	Screw
Dimensions (mm)	100	150	300
Matched Quectel Modules	All 5G modules (RM50xQ Series, RG50xQ Series)		

The parameters shall be subject to the Specification.