

Antenna Solutions For Automotive



On Board Diagnostic (OBD)

- Wi-Fi/BT
- GNSS
- LTE

Infotainment

- Wi-Fi/BT
- GNSS
- 3G/4G/5G

In Vehicle Wireless Charger

- Coil + Sheet

E-Call

- 3G/4G/5G
- Wi-Fi/BT
- GNSS

Telematic Control Unit (TCU)

- Wi-Fi/BT
- V2X
- GNSS
- SDARS
- LTE/5G
- AM/FM
- RKE

Collision Avoidance Radar

- 77 GHz

Tire-pressure Monitoring System (TPMS)

- 2.4 GHz
- 315 MHz
- 433 MHz

Battery Management System (BMS)

- 2.4 GHz

Smart Entry / Key Fob / PEPS / RKE

- UWB
- Wi-Fi
- NFC
- LF

Key:

- Standard Antenna
- Custom Antenna

RELIABLE ANTENNAS FOR AUTOMOTIVE APPLICATIONS

	<p>Wireless Battery Management Systems (wbMS)</p>		<p>A1001013</p> <p>This A-series SMD Antenna is designed to work in different environments on-ground or off-ground, achieving higher functionality in the two cases at 2.4 GHz</p>	<p>ANALOG DEVICES</p> <p>Reference Design</p> <p>Performance and Robustness in Metal-Intensive Environments</p>	
	<p>Telematic Control Unit (TCU)</p>		<p>AP822601</p> <ul style="list-style-type: none"> Mechanical Robustness Onboard Tuning Capabilities Aperture Tuning Possibilities Mirror and Corner Placement Versions 	<p>Quality and Performance for Enhanced Connectivity</p>	
	<p>Tire Pressure Monitoring System (TPMS)</p>		<p>A9001978</p> <ul style="list-style-type: none"> Automotive Ultra-Small 2.4 GHz Chip Antenna Size: 1 x 0.55 mm 	<p>Reliability with Miniature Antennas</p>	
	<p>Infotainment</p>		<p>A1000146</p> <ul style="list-style-type: none"> High Wi-Fi Performance Onboard Tuning Capabilities 	<p>Ensuring Reliability and Performance in Embedded On-Board Systems</p>	
	<p>Key FOBs</p>		<p>A1001312</p> <ul style="list-style-type: none"> Miniature SMT UWB Embedded Antenna Size: 2 x 1.2 mm 	<p>Optimal Performance with the Smallest Antennas</p>	
	<p>Dedicated Short Range Communications (DSRC)</p>		<p>A1002298</p> <p>Vertical Polarized Antennas for Maximizing V2I Performance</p>	<p>Amplifying Range with Cutting-Edge Antennas</p>	

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A-SERIES LOW-PROFILE AUTOMOTIVE ANTENNAS

KYOCERA AVX has completed rigorous testing to qualify the A-series antennas for automotive applications. Although the AEC-Q200 standard does not include antenna products, all testing has been done following applicable AEC-Q200

requirements and procedures as closely as possible.

Customers must provide additional quality requirements, if any, to drive specific, additional compliance testing.



Standard Antennas vs. A-Series Antennas Mechanical Characteristics

Characteristics	Standard Antennas	A-Series Antennas
Temperature Range	-40/+85 C	-50/+125 C
Temperature Cycle	N/A	IEC 60068-2-14
Temperature Exposure	N/A	MIL-STD-202 Method 108
High Temperature High Humidity (HTHH)	MIL-STD-202 Method 103. per spec.: 96 Hrs.	MIL-STD-202 Method 103. per spec.: 168 Hrs.
Mechanical Shock	N/A	IEC 60068-2-27
Vibration	N/A	IEC 60068-2-6



TEST SERVICES



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