

External DSRC Antennas

Mini DSRC Adhesive Antennas


The GSA.8859 Mini DSRC antenna is an external adhesive mount antenna that operates from 5850-5925MHz for DSRC systems. At a height of just 10mm, its compact size enables flexibility of integration. The antenna features high peak gain at 4.14dBi when mounted on glass and 3.24dBi when mounted on 2mm thick plastic.

The OMB.5900 is an IP67 rated dipole antenna that can be used to set up DSRC mesh networks. Its design allows for a uniform omnidirectional radiation pattern and with high gain promotes reliable coverage



Model No	Electrical Data*	Mechanical Data
GSA.8859 5.9GHz Antenna Adhesive Mini DSRC	Frequency 5850~5925MHz Peak Gain 2.57dBi Efficiency 68.3% Impedance 50Ω Return Loss <-10dB Polarization Linear	Dimensions 36*30*10mm Weight 42g Enclosure PP Connector** SMA(M) ST Cable** 1M CFD-200 Adhesive 3M VHB 4941 Op. Temp. -40°C~+85°C

[Datasheet](#)

Model No	Electrical Data	Mechanical Data
 OMB.5900 5.9GHz 10dBi Omnidirectional Outdoor Antenna	Frequency 5850~5925MHz Radiation Pattern Omnidirectional Peak Gain 10.2dBi Efficiency 63.97% Impedance 50Ω Return Loss <-15dB Polarization Vertical Max Input Power 50W	Dimensions H: 550mm; Ø24 Mounting Wall/Pole Mount Bracket Application Indoor/Outdoor Connector N Type Female Op. Temp. -40°C~+85°C

[Datasheet](#)

* In free space. ** Cable and Connectors are Customizable.





Embedded DSRC Antennas

DSRC Patch Antennas

The DCP.5900.25 is a 25*25*4mm embedded PTFE HF patch DSRC antenna.

This high performance 7dBi directional antenna is designed to operate at 5850-5925MHz and is circularly polarized for a more stable system signal strength on moving vehicles. Tuned for a center position on a 70*70mm ground plane, it features world leading efficiency at 78%, and an axial ratio of approximately 2dB. The DCP.5900.12.A.02 is a 12*12*4mm model with a peak gain of 6dBi and impressive 75% efficiency on a 70*70mm ground plane.

The CA.51 is a high efficiency miniature SMD antenna with an extremely small footprint requirement. This ceramic chip antenna was designed specifically for IEEE 802.11p / DSRC applications and at just 1.6*0.8*0.3 it is one of the smallest DSRC antennas worldwide.

	<p>Model No SDCP.5900 Circular Polarized Embedded DSRC SMD Ceramic Patch Antenna</p>	<p>Electrical Data</p> <p>Frequency 5.9GHz Polarization RHCP Impedance 50Ω Peak Gain 4.64dBi VSWR < 2 Efficiency 60.45%</p>	<p>Mechanical Data</p> <p>Dimensions 12*12*4mm Weight 2.0g Op. Temp. -40°C~+85°</p> <p>Datasheet</p>
	<p>Model No DCP.5900.12 DSRC Pin Type Ceramic Patch Antenna</p>	<p>Electrical Data</p> <p>Frequency 5.9Mhz Polarization RHCP Impedance 50Ω Peak Gain 5.32dBi VSWR 1.8 max Efficiency 75.25%</p>	<p>Mechanical Data</p> <p>Dimensions 12*12*4mm Weight 2.1g Op. Temp. -40°C~+85° Material Ceramic Pin Diameter 0.85mm Pin Length 1.7mm</p> <p>Datasheet</p>
	<p>Model No DCP.5900.25 Pin Type PTFE HF Patch Antenna</p>	<p>Electrical Data</p> <p>Frequency 5.9Mhz Polarization RHCP Impedance 50Ω Peak Gain 7.57dBi Efficiency 78.48%</p>	<p>Mechanical Data</p> <p>Dimensions 25*25*4mm Weight 6.12g Op. Temp. -40°C~+85° Pin Diameter 0.8mm Pin Length 3.0mm</p> <p>Datasheet</p>
	<p>Model No CA.51 Low Profile SMD Ceramic Chip Antenna</p>	<p>Electrical Data</p> <p>Frequency 5.9Mhz Polarization Linear Impedance 50Ω Peak Gain 2.87dBi VSWR 2 max Efficiency 57%</p>	<p>Mechanical Data</p> <p>Dimensions 1.6*0.8*0.3mm Weight 2.0g Op. Temp. -40°C~+85° Material Ceramic</p> <p>Datasheet</p>

DSRC Antennas

DSRC SMD & Dipole Antennas

Our Triton TD.10 is a dipole terminal antenna operating between 5850-5925MHz for DSRC systems. It supports high speed, low latency and short range V2V and V2X communications. The TD.10 does not require a ground plane and offers market leading efficiency of over 70%.



Model No

TD.10
Triton
Dipole Terminal
For V2V and V2X

Electrical Data*

Frequency. 5850-5925MHz
Average Gain -1.34dBi
Return Loss <-10dB
Peak Gain 5.88dBi
VSWR <2:1
Efficiency 73.48%
Impedance 50Ω
Polarization Linear

Mechanical Data

Dimensions H: 169mm, Ø: 18mm
Connector Hinged SMA(M)
Weight 21.75g
Op. Temp -40°C ~ +85°C

[Datasheet](#) 

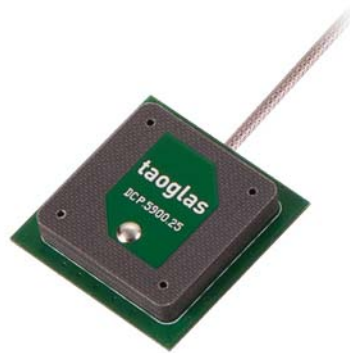
*On 30*30cm ground plane.

5.9GHz DSRC PTFE Patch Antenna

DSRC Patch Antennas on Board

The DCP.25A is a 25*25*4mm PTFE patch antenna mounted on a 30*30 PCB, designed to operate at 5850-5925MHz for DSRC systems. This antenna features high efficiency and circular polarization to enable a more stable system signal strength on moving vehicles where orientation is constantly changing.

Custom patch tuning is available to optimize to specific device environments, including off-center positioning or different ground plane sizes, subject to NRE and MOQ. The DCP.25A is supplied with 150mm of RG-178 with an IPEX MHFI connector, both of which can be customised. Contact your regional Taoglas office for this and other support with integration and testing of antenna performance in your device.



Model No

DCPP.25A
5.9GHz DSRC PTFE
Patch Antenna
on PCB board

Electrical Data

Frequency	5850-5925MHz
Polarization	RHCP
Efficiency	46.88%
Peak Gain	-2.89dBi
Average Gain	-3.29
Axial Ratio	< 2 at zenith
Impedance	50Ω

Mechanical Data

Dimensions	30*30*5mm
Cable	150mm RG-178
Connector	IPEX MHFI
Weight	9.3g
Op. Temp.	-40°C~+85°
Humidity	Non-condensing 65°C 95% RH

[Datasheet](#) 