



Congestion Pricing Antenna

Applications

- Automatic Vehicle Identification (AVI)
- Congestion Pricing
- Traffic Flow Monitoring
- Traffic Management
- Micro-Mobility
- Curbside Management



Product Description

Vespira curved antenna is specifically designed to be a curb-side antenna for smart city initiatives such as congestion pricing and traffic monitoring using passive tags. It is designed to be flush-mounted upright on utility poles and it fits naturally into urban environments.

Vespira creates an ideal read zone for congestion pricing and traffic management applications. With the commercial and business center road layouts in mind, the unique tunable phased array down-tilt design allows Vespira to effectively angle and direct radio frequency energy while flush-mounted in an upright position. In addition, the wide beam provides enough coverage for up to two traffic lanes.

In addition to being aesthetically pleasing, the upright flush-mounting design provides some important functional features. First, it helps reduce wind-loading and improve safety. Second, it keeps Vespira simple by eliminating the need for a heavy or bulky mechanical down-tilt bracket.

Built with a heavy-duty all weather housing, Vespira is meant to last in the harshest roadside environments.



Highlights

- Upright flush-mounted
- Tunable phased array down-tilt design
- Wide beam providing enough coverage for up to two lanes
- Heavy-duty all weather housing
- Fits naturally into urban environments

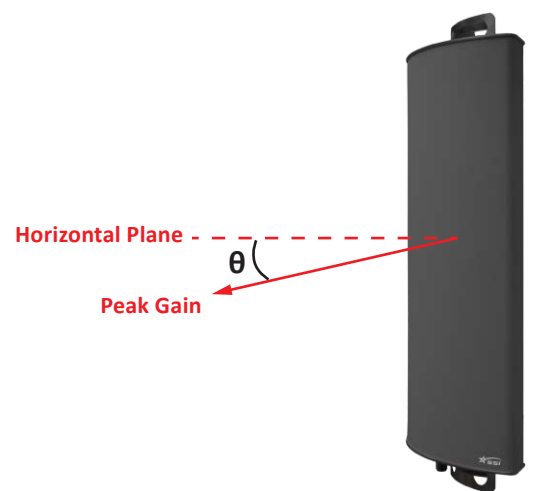
Specifications

Dimensions (L x W X H)	598 x 273 x 96 mm (23.54 x 10.74 x 3.77")
Thickness	60.5 mm (2.38")
Weight	3.51 kg (7.73 lbs)
Frequency Range	902 - 928 MHz
Return Loss	< -15 dB
Polarization	Linear
Horizontal Beamwidth	60°
Vertical Beamwidth	30°
Axial Ratio	N.A.

Downtilt Angle (θ)	
-S-downtilt	8°
-M-downtilt	12°
-L-downtilt	16°

Gain	
-S-downtilt	12.0 dBi
-M-downtilt	11.0 dBi
-L-downtilt	10.0 dBi

Impedance	50 Ω
Maximum Input Power	6 Watt
Operating Temperature	-55°C to +77°C (-67°F to +170.6°F)
Connector	N-type Female
Mounting Kit	Included (Metal Straps)

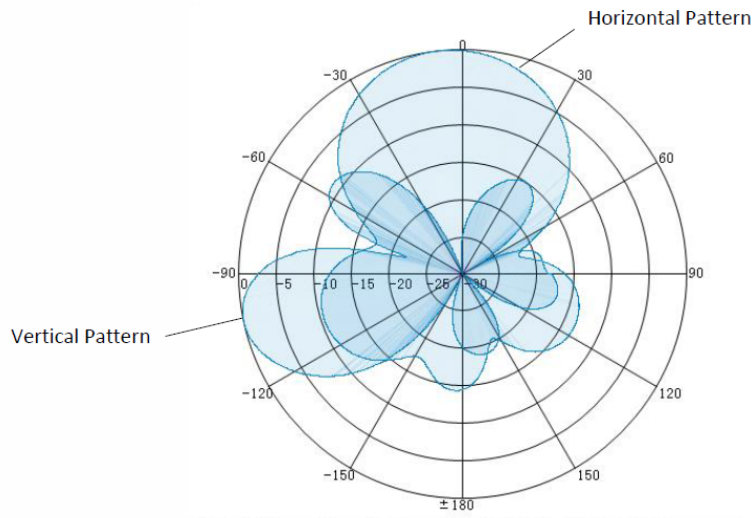


Vespira Mounted Vertically Upright

4.1.2 Radiation Patterns

4.1.2.1 Vespira (LP) – M – 12 deg

915 MHz



频率	测试面	极化	峰值	3dB宽度	前后比值	天线倾角	绝对倾角	Gain
915	垂直面	垂直	-14.70	26.24	17.01	-12.40		
915	水平面	水平	-18.60	55.56	14.36			11.74