

R8658-LP

American Made UHF RFID Antennas
Part of our Patriot Series Antennas

Made in
the USA



R8658-LPV-SSF with
100mm VESA pattern



R8658-LPF-SSF with four
mounting corners

RFMAX

The R8658-LP Series Antennas from RFMAX Patriot Series are the newest low-profile, flush or VESA mounted, circularly polarized panel antennas for UHF RFID. The mounting profile of these antennas are smaller and more aesthetically pleasing than any other RFID antenna on the market today. These antennas were specifically designed by RFID professionals - for RFID professionals. The RFMAX engineers worked to design-in the very best UHF RFID performance in the smallest possible package. We are proud to announce that all R8658 antennas are manufactured in the USA.

Features:

- High Impact, IP67 Rated construction to withstand industrial applications and outdoor environments
- Low-profile, aesthetically pleasing for use in any professional/office environment
- Superior RF performance with excellent coverage area, both indoor and outdoor
- Flush or articulating mounting models
- Fully compliant for US government contracts
- Industry's best warranty – 5 years
- Designed and built in the USA!

| SKU | Frequency | Connector Type | Mount | Connectors |
|----------------------|-------------|-----------------|----------------------------|------------|
| R8658-LPV-SSF | 865-868 MHz | Fixed Connector | 4-Stud 100mm VESA | SMA-Female |
| R8658-LPF-SSF | 865-868 MHz | Fixed Connector | Flush Four Corner Holes | SMA-Female |

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Electrical Specifications

| | | |
|-----------------|-----------------------|------|
| Frequency [MHz] | 865-868 MHz | |
| Gain | 8.5 dBic | |
| Axial Ratio | 1.4 Typical / 2.0 Max | |
| VSWR | < 1.2:1 | |
| Input Impedance | 50 Ohm | |
| Polarization | RHCP - Circular | |
| Beamwidth | Vertical/Elevation | 68 ° |
| | Horizontal/Azimuth | 68 ° |

Environmental Specifications

| | |
|--|------------|
| Operating Temperature [°C] | -20 to +55 |
| Storage Temperature [°C] | -30 to +65 |
| Relative Humidity MIL-STD810G, method [°C] | 85 |
| Environmental Rating | IP67 |

Mechanical Specifications

| | |
|-----------------------------|---------------------------|
| Color | White |
| Weight [lbs/g] | 1.6 / 750 |
| Length and Width [in/mm] | 9.85 x 9.85 / 250 x 250 |
| Thickness [in/mm] | 0.55 / 14 |
| Mounting | Flush or 100mm VESA |
| Connector Type and Position | SMA-Female Side Connector |
| Radome Material | UV-Resistant ABS |

SMA-Female

Low Profile
R8658



Recommended Accessories:

| SKU | Descriptions |
|-------------------|--|
| HDMNT-100MM | Heavy Duty 100mm VESA mount |
| EZ-M6-Combo | Easy to position bracket with 100mm VESA pattern |
| PT240-xxx-RTM-SSM | High quality, low loss cable |

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| SKU | Pictures | Information |
|--------------------------|----------|---|
| R8658-LPV-SSF (60004) | | ETSI. IP67 RHCP RFID Antenna. 865-868 MHz / ETSI. 8.5 dBic gain. BW= 68 deg. H&V. Size: 9.85 x 9.85 x .55 in. with side entry SMA-F |
| R8658-LPF-SSF (60002) | | ETSI. IP67 RHCP RFID Antenna. 865-868 MHz / ETSI. 8.5 dBic gain. BW= 68 deg. H&V. Size: 9.85 x 9.85 x .55 in. with side entry SMA-F |
| HDMNT-100MM | | RFMAX - Die Cast Heavy Duty Wall/Mast Mount For RFMAX 12 X 12 In. Antennas Or Any Device With 100mm VESA |
| EZ-M6-Combo | | Articulating Wall/Mast Combo Mounting Kit. Black Metallic E-Z Mount Kit. 6 Inch Arm 2 Or 4 Stud Antennas |
| PT240-XXX-RTM-SSM | | Pigtail: 50 Ohm (Black) LMR240 Type Coaxial Cable. With Reverse Polarity TNC Male And Standard SMA Male Connectors |

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Environmental Tests

| Test | Standard | Duration | Temperature | Notes |
|-------------------|--------------|--------------------------|-------------|------------------------------------|
| Low Temperature | IEC 68-2-1 | 72 Hours | -55° C | |
| Thermal Shock | | 1 Hour | -45 / 70° C | 3 Cycles |
| Humidity | | 72 Hours | 85° C RH | |
| Dust Resistance | IEC 60529 | 8 Hours | | With vacuum |
| Solar Radiation | | 4 Days | | 340 nm |
| Impact Resistance | | | | 1 lb ball drop at 24" |
| Salt Fog | Mil-Std-810G | 24 Hours in-24 Hours out | | 2 cycles |
| Vibration Vehicle | Mil-Std-810G | 1 Hour X 3 axes | | 10-500Hz, 1.04 Grms |
| Shock-Half Sine | Mil-Std-810G | | | 10G/11ms, 5 shocks X 6 directions |
| Shock-Drop | Mil-Std-810G | | | 26 drops at 48" |
| High Temp Storage | | 24 Hours each temp | | 60C, 65C, 70C, 80C, 85C, 90C & 95C |