



Zebra UHF RFID Antennas

Versatile, high-performance antennas
for a wide variety of applications





Zebra UHF RFID Antennas

Versatile, high-performance antennas for a wide variety of applications

Zebra's family of Radio Frequency Identification (RFID) Antennas offers the versatility and performance required to meet diverse environmental and application needs—including customer-facing areas, warehouses and outdoor environments. When used in conjunction with Zebra's Fixed RFID Readers, communication with UHF RFID tags is accurate, fast and efficient. As vital components in reader-tag communications, our portfolio of high-performance antennas can meet the needs of any RFID solution.

Whether your application requires an antenna that blends into the environment, is IP67 sealed for rugged and extreme weather environments, or slim to fit into small spaces, we have the right antenna to complete your solution.

One pain point when choosing an antenna for your RFID solution is knowing which antenna can be used with a fixed RFID reader in order to get maximum performance while not to exceeding your local regulations. Zebra's UHF RFID antennas have been specifically tested with our fixed reader portfolio to ensure that the highest performance is possible while still maintaining compliance with regulatory standards.

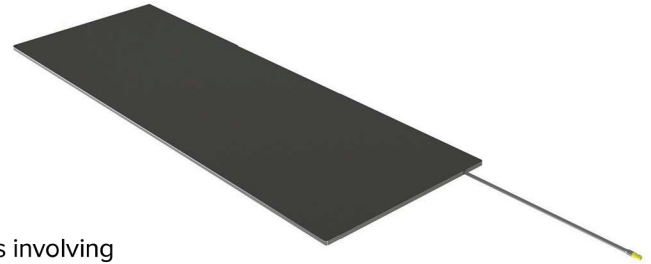
Service Completes the Solution

To help you seamlessly and successfully integrate your RFID antennas into your environment, Zebra offers a complete suite of services that span the entire solution lifecycle—from initial planning and assessment through ongoing training and support.

For more information about Zebra RFID antennas for fixed readers and how our enterprise mobility solutions can give your organization a competitive advantage, please visit us on the web at zebra.com/antennas or access our global directory at zebra.com/contact.



Zebra AN650 Ultra-Low-Profile Circularly Polarized UHF Ground Antenna



Slim, ultra-low-profile ground antenna designed to lay flat on the ground and support moderate loads

The AN650 ultra-low-profile ground is optimized for RFID deployments involving moving products, assets and people. From conference attendee and people tracking to retail presence, awareness/loyalty and race timing, the AN650 is ideal for applications where traditional side antennas are unsuitable or not optimized for the application. At just 8 mm/0.3 in. thick, the durable, high-performance AN650 is uniquely capable of lying flat on the ground within a doorway-sized footprint.

AN650 Specifications

PHYSICAL CHARACTERISTICS	
Polarization	RHCP (Right Hand Circular Polarized)
Dimensions	915 mm x 305 mm X 8 mm/ 36.02 in. x 12.00 in. x 0.31 in.
Connector	SMA Female Side Fly Lead (300 mm/1 ft.)
Radome Material	Fire retardant ABS
Anti-static Protection	Yes, DC grounded
Weight	2.4 kg/5.29 lbs Gross: 2.8 kg/6.17 lbs
Radome Material	Fire retardant ABS
Frequency Ranges	EU: 865–868 MHz US: 902–928 MHz
VSWR (Return Loss)	1.4 typical

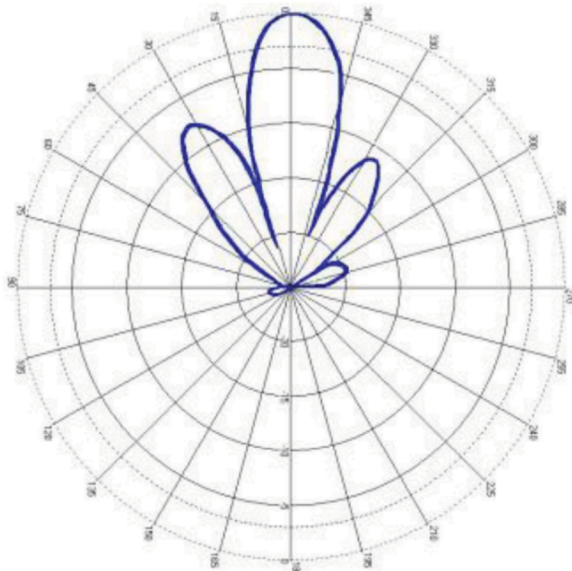
Gain	9 dBiC typical
Front to Back Ratio	24 dB
3 dB Beam Width	20° in xz-plane, 80° in yz-plane
Maximum Power	3 Watts
Axial Ratio	2 dB typical
Operating Temperature	-20° to +55°C/-4° to +131°F
Storage Temperature	-30° to +65°C/-22 to +149°F
IP Sealing	IP65
Nominal Impedance	50 Ω
Antenna Detection	10 K Ω resistance

Vertical Markets

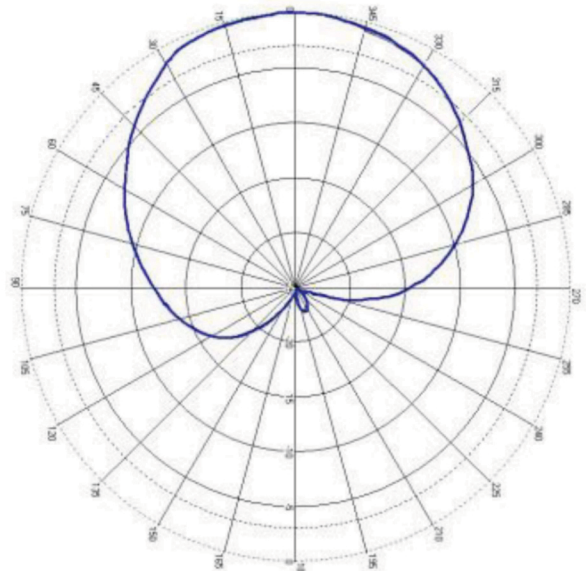
- Retail
- Enterprise/Office
- Data center
- Hospitality
- Healthcare

Applications

- Conference attendee/ people tracking
- Retail presence aware/ loyalty based marketing
- Race and event timing



XZ-Plane



YZ-Plane

