



## Zebra UHF RFID Antennas

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





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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](https://zebra.com/antennas) or access our global directory at [zebra.com/contact](https://zebra.com/contact).



# Zebra AN440 Dual-Element RFID Antenna

Large area coverage for high-capacity, high-throughput environments

The AN440 RFID antenna gives you a wide read field and high-speed RF signal conversion, so data capture is fast and accurate, even in expansive, high-demand environments. The AN440 is easy to mount on ceilings and walls, and its rugged housing is at home in both customer-facing and industrial settings. You can achieve superior read zones around stockroom shelves, warehouse doorways and dock doors—anywhere boxes and pallets are moving in and out of your facility. Your workflow keeps flowing, your inventory count stays accurate and your productivity can reach new heights.



## AN440 Specifications

PHYSICAL CHARACTERISTICS	
<b>Polarization</b>	1 x left-hand circular/1 x right-hand circular
<b>Dimensions</b>	575.1 mm x 259.1 mm x 33.52 mm/ 22.6 in. x 10.2 in. x 1.32 in.
<b>Connector</b>	Dual N-Type Female
<b>Connector Location</b>	Rear
<b>Mounting Options</b>	Mounting studs provided
<b>Weight</b>	3.2 kg/7.0 lbs
<b>Casing/Materials</b>	UV Stable ASA
<b>Frequency Ranges</b>	EU: 865–868 MHz US: 902–928 MHz*
<b>VSWR (Return Loss)</b>	1.22:1
<b>Gain</b>	US/Canada: 6.0 dBil

<b>Front to Back Ratio</b>	20 dB
<b>3 dB Beam Width</b>	70° in both planes
<b>Maximum Power</b>	10 Watts
<b>Axial Ratio</b>	1 dB typical
<b>Operating Temperature</b>	-30° to +70°C/-22° to +158°F
<b>Storage Temperature</b>	-40° to +85°C/-40° to +185°F
<b>IP Sealing</b>	IP67
<b>Vibration</b>	MIL-STD-810G, Method 507.5, Procedure II–Aggravated, IEC-68-2-6 (10 to 150 Hz, 0.5g, one hour in each of two axes–random vibration)
<b>Humidity</b>	IEC-68-2-30 (-25° to +40°C/-13° to +104°F) 24 hour cycles of 90% relative humidity

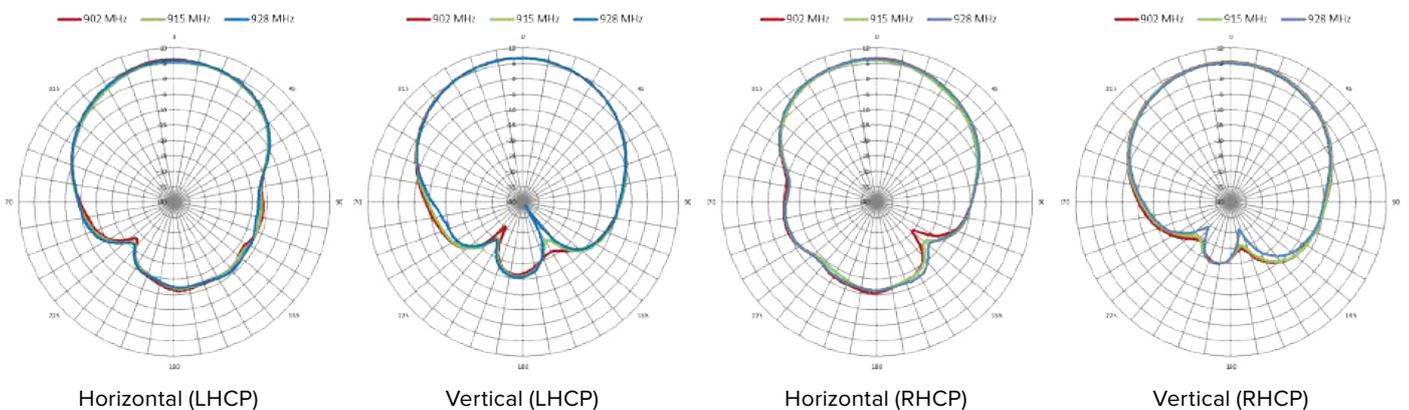
### Vertical Markets

- Retail
- Enterprise/Office
- Hospitality
- Healthcare
- Transportation & Logistics
- Manufacturing

### Applications

- Point of sale
- Conveyor belts
- Control points
- Hallways
- Dock doors

\* Optimized for US



# Zebra AN480 Wide-Band RFID Antenna

High-performance, wide-band antenna for worldwide use

The AN480 single port antenna offers maximum performance and flexibility. The low axial ratio is nearly 50 percent lower than typical competitive devices, delivering a more uniform gain—and better performance. The wide frequency range enables this antenna to be utilized in worldwide deployments providing cost-efficiencies and a simplified RFID infrastructure. The AN480 can be installed throughout the enterprise in manufacturing and warehouse floor environments, or any dock door receiving application. As with all Zebra antennas, the AN480 uses Zebra’s standard mounting bracket. Mounting the antenna for the first time or upgrading an existing Zebra antenna with the AN480 is fast and easy.



## AN480 Specifications

PHYSICAL CHARACTERISTICS	
<b>Polarization</b>	Left-hand circular or right-hand circular
<b>Dimensions</b>	259.1 mm x 259.1 mm x 33.5 mm/ 10.2 in. x 10.2 in. x 1.32 in.
<b>Connector</b>	N-Type Female
<b>Connector Location</b>	Rear
<b>Mounting Options</b>	Mounting studs provided
<b>Weight</b>	1.13 kg/2.5 lbs
<b>Casing/Materials</b>	Aluminum with white plastic cover
<b>Frequency Ranges</b>	865–956 MHz
<b>VSWR (Return Loss)</b>	1.3:1

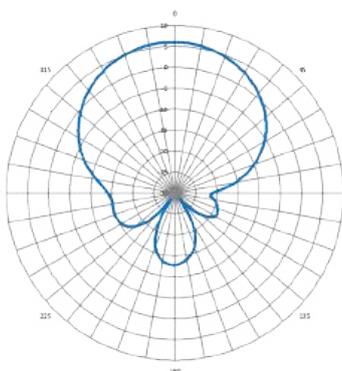
<b>Gain</b>	6.0 dBiL
<b>Front to Back Ratio</b>	18 dB
<b>3 dB Beam Width</b>	65° in both planes
<b>Maximum Power</b>	2 Watts
<b>Axial Ratio</b>	1.5 dB typical
<b>Operating Temperature</b>	-25° to +70°C/-13° to +158°F
<b>Storage Temperature</b>	-40° to +70°C/-40° to +158°F
<b>IP Sealing</b>	IP54
<b>Vibration</b>	IEC-68 series
<b>Humidity</b>	IEC-68-2-30

### Vertical Markets

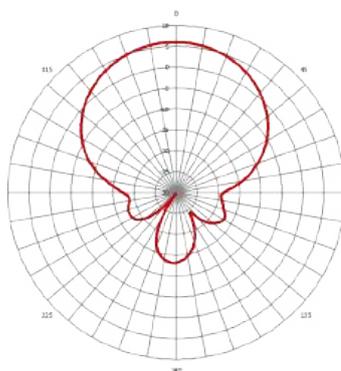
- Retail
- Enterprise/Office
- Hospitality
- Healthcare

### Applications

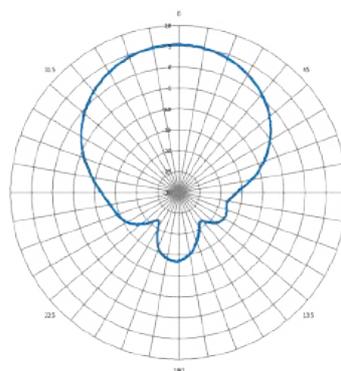
- Point of sale
- Control points
- Hallways



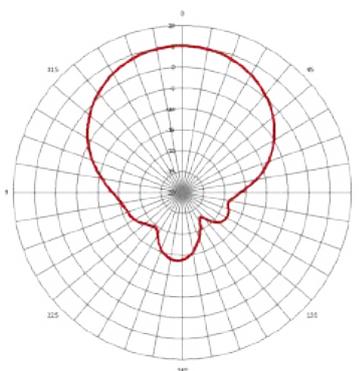
Horizontal (FCC)



Vertical (FCC)



Horizontal (ETSI)

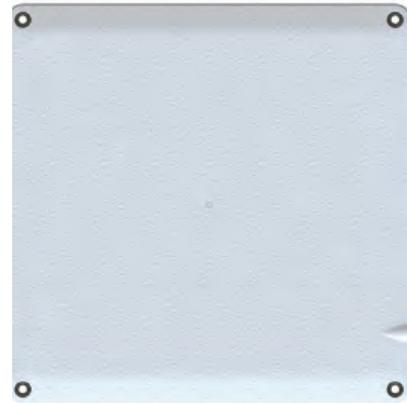


Vertical (ETSI)

# Zebra AN510 Ultra-Rugged, Low-Profile Antenna

IP67 rated for indoor and outdoor applications

The AN510 ultra-rugged, low-profile antenna, with an IP67 rating, is suitable for use in a wide range of indoor and outdoor environments including outdoor shopping areas, receiving dock doors, ceilings, out on the tarmac and on conveyor belts, to name a few. The outer housing is designed to be sleek and discreet enough to be at home in any business but rugged enough for outdoor industrial environments. The versatile flush and VESA-studded mounting options make installation and mounting simple.



## AN510 Specifications

PHYSICAL CHARACTERISTICS	
<b>Polarization</b>	Right-hand circular
<b>Dimensions</b>	250 mm x 250 mm x 14 mm/ 9.85 in. x 9.85 in. x 0.55 in.
<b>Connector</b>	SMA Female
<b>Connector Location</b>	side mounted
<b>Mounting Options</b>	Flush mount or VESA mount
<b>Weight</b>	0.75 kg/1.6 lbs
<b>Casing/Materials</b>	UV-Resistant ABS
<b>Frequency Ranges</b>	EU: 865–868 MHz US: 902–928 MHz
<b>Gain</b>	8.5 dBic

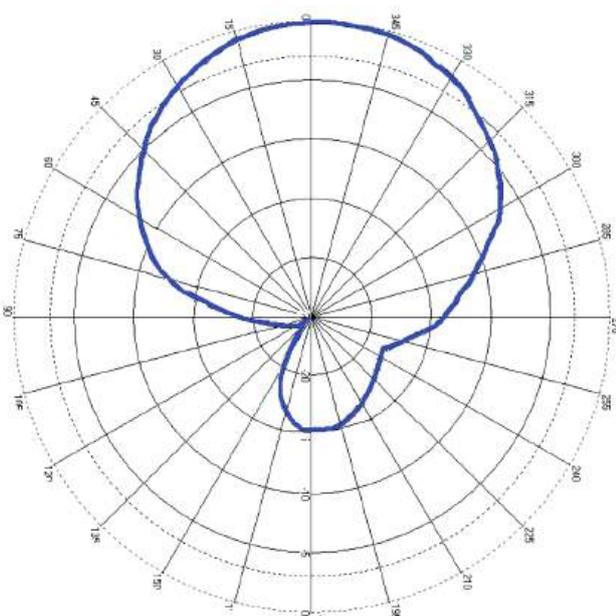
<b>VSWR (Return Loss)</b>	1.3:1
<b>Front to Back Ratio</b>	20 dB
<b>3 dB Beam Width</b>	68° in both planes
<b>Maximum Power</b>	3 Watts
<b>Axial Ratio</b>	1 dB
<b>Operating Temperature</b>	-20° to +55°C/-4° to +131°F
<b>Storage Temperature</b>	-30° to +65°C/-22° to +149°F
<b>IP Sealing</b>	IP67
<b>Vibration</b>	MIL-STD-810G
<b>Humidity</b>	72 Hours @ 85°C relative humidity

### Vertical Markets

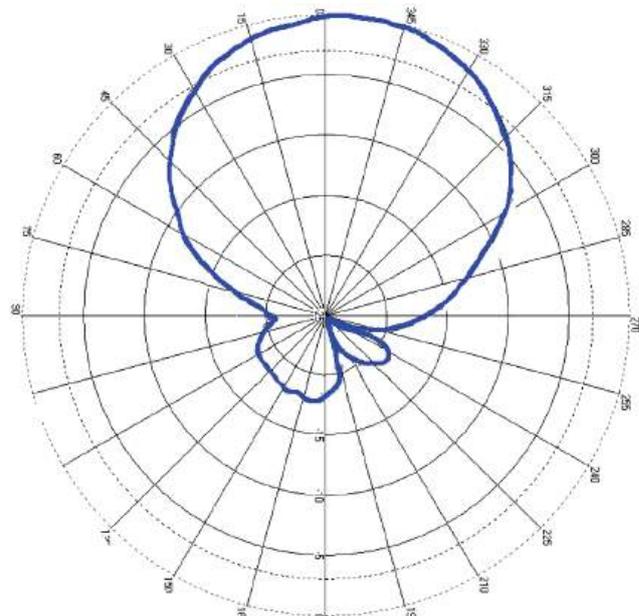
- Retail
- Warehouse Management
- Manufacturing
- Cold-chain
- Aviation

### Applications

- Outdoor shopping areas
- Receiving dock doors
- Ceilings and walls to create superior read zones around shelves
- Freezers and freezer trucks
- Baggage tracking solutions
- Access control systems



Horizontal (ETSI and FCC)



Vertical (ETSI and FCC)

# Zebra AN520 Ultra-Rugged, Low-Profile Antenna

IP68 rated for indoor and outdoor applications

The AN520 ultra-rugged, low-profile antenna, with an IP68 rating, is suitable for use in a variety of indoor and outdoor environments that require a small-form-factor, high-performance antenna. The outer housing is designed to be sleek and discreet enough to be integrated into any business, but rugged enough for outdoor industrial environments. The versatile flush mount blends into any location.

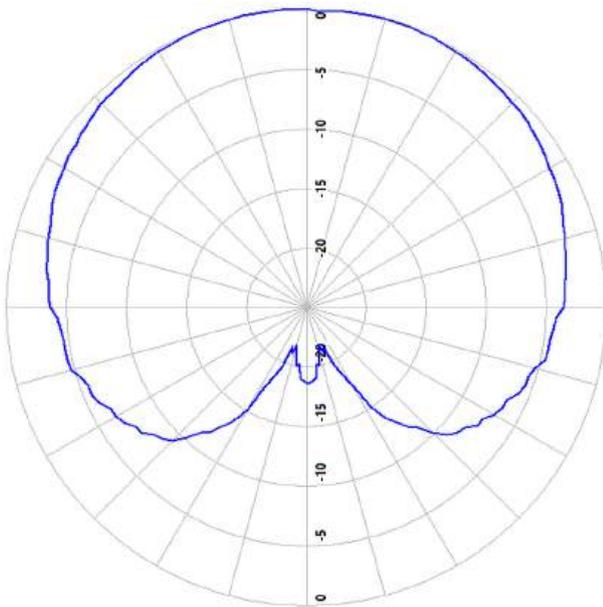


## AN520 Specifications

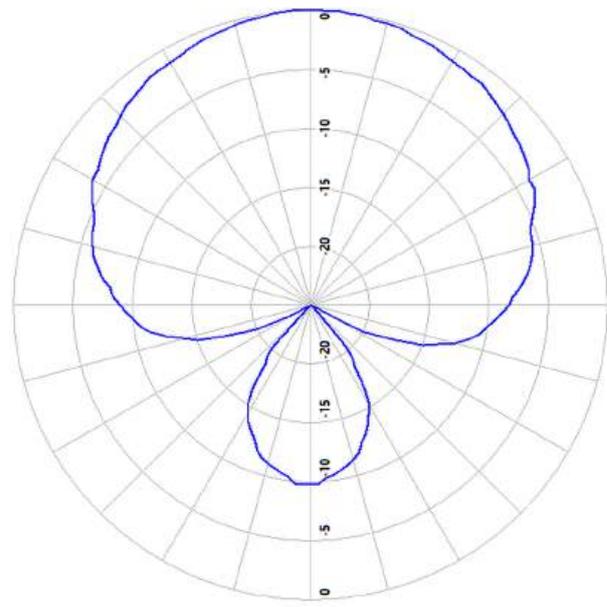
PHYSICAL CHARACTERISTICS	
Polarization	RHCP (Right Hand Circular Polarized)
Dimensions	150 mm x 150 mm x 14 mm/ 5.9 in. x 5.9 in. x 0.55 in.
Connector	SMA Female
Connector Location	Side connector
Mounting Options	Flush mount
Weight	0.25 kg/0.55 lbs
Casing/Materials	UV-Resistant ABS
Frequency Ranges	EU: 865–868 MHz US: 902–928 MHz
Gain	5.5 dBiC typical

VSWR (Return Loss)	1.4 typical
Front to Back Ratio	-10 dB
3 dB Beam Width	115° in both planes
Maximum Power	3 Watts
Axial Ratio	2 dB typical
Operating Temperature	-40° to +65°C/-40° to +149°F
Storage Temperature	-40° to +65°C/-40° to +149°F
IP Sealing	IP68
Vibration	IEC60068-2-64
Humidity	72 Hours @ 85°C relative humidity

- Vertical Markets**
- Retail
  - Warehouse Management
  - Manufacturing
  - Cold-chain
  - Aviation
  - Enterprise
- Applications**
- Point of sale
  - Under the counter/ within shelving
  - In server racks
  - Inside medical cabinets
  - Luggage tracking
  - Access control
  - Manufacturing line
  - Receiving dock doors



Horizontal (ETSI and FCC)



Vertical (ETSI and FCC)

# Zebra AN610 Ultra-Low-Profile RFID Antenna

Slim with integrated mounting holes for a space-saving, simple solution

Whether your application calls for a “picture-frame” aesthetic or a space-saving antenna deployment, look to the ultra-low-profile member of the Zebra family—the AN610. The AN610 features a simple, integrated mounting system with holes built right into the antenna that let it stand just under one-half inch (12 mm) from horizontal or vertical mounting surfaces. Space-saving and stylish, the outer housing is designed to be sleek and discreet enough to be at home in any business setting but rugged enough for indoor industrial environments. A perfect complement to the Zebra fixed RFID readers, the AN610 is ideal for use in wall mount, doorways, under counter, above counter as an RFID pad, on shelves, at the point of sale, or end-cap displays, or locations that have limited space like jewelry counters.



## AN610 Specifications

PHYSICAL CHARACTERISTICS	
<b>Polarization</b>	Left-hand circular
<b>Dimensions</b>	275 mm x 214 mm x 12 mm/ 10.8 in. x 8.5 in. x 0.47 in.
<b>Connector</b>	N-Type Female
<b>Connector Location</b>	Pigtail-Side
<b>Mounting Options</b>	Flush mount
<b>Weight</b>	0.6 kg/1.3 lbs
<b>Casing/Materials</b>	Aluminum with Kydex Casing
<b>Frequency Ranges</b>	EU: 865–868 MHz US: 902–928 MHz
<b>VSWR (Return Loss)</b>	1.4:1

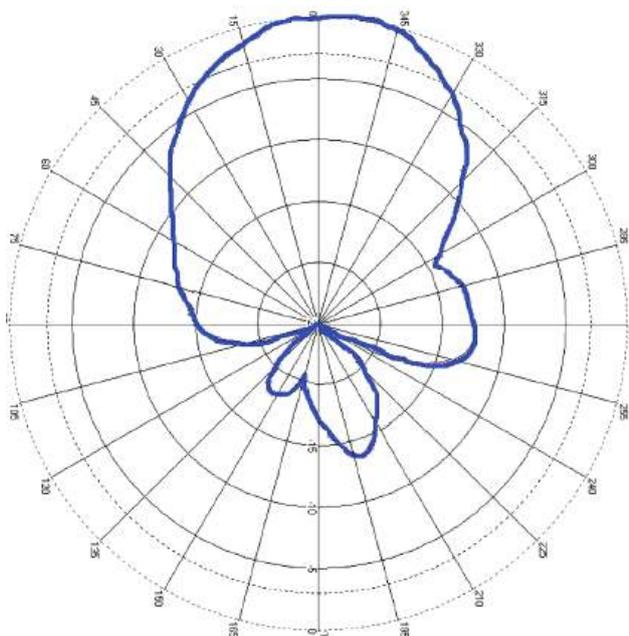
<b>Gain</b>	5.0 dBiC
<b>Front to Back Ratio</b>	18 dB
<b>3 dB Beam Width</b>	80° in both planes
<b>Maximum Power</b>	6 Watts
<b>Axial Ratio</b>	less than 2 dB
<b>Operating Temperature</b>	-20° to +55°C/-4° to +131°F
<b>Storage Temperature</b>	-30° to +65°C/-22° to +149°F
<b>IP Sealing</b>	IP54
<b>Vibration</b>	IEC-68-2-6 (10 to 150 Hz, 0.5 g, one hour in each of two axes) (Random Vibration)
<b>Humidity</b>	IEC-68-2-30 (-13°F to 104°F, -25°C to 40°C) 24 hour cycles of 90% relative humidity

### Vertical Markets

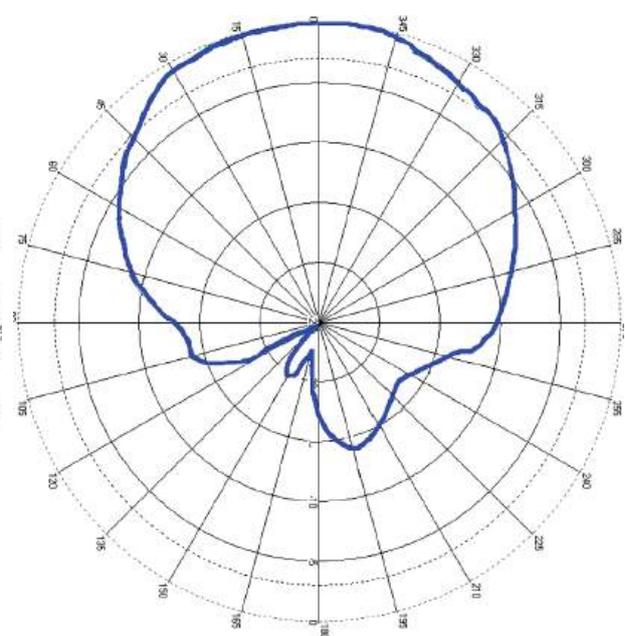
- Retail
- Enterprise/Office
- Data center
- Hospitality
- Healthcare

### Applications

- Point of sale
- Receiving dock doors
- Under-the-counter/  
within shelving
- In server racks
- Inside medical cabinets



Horizontal (ETSI and FCC)



Vertical (ETSI and FCC)

# Zebra AN620 Ultra-Low-Profile RFID Antenna

Slim with integrated mounting holes for a space-saving, simple solution

Whether your application calls for a “picture-frame” aesthetic or a space-saving antenna deployment, look to the ultra-low-profile member of the Zebra family—the AN620. The AN620 features a simple, integrated mounting system with holes built right into the antenna that let it stand just under one-half inch (12 mm) from horizontal or vertical mounting surfaces. Space-saving and stylish, the outer housing is designed to be sleek and discreet enough to be at home in any business setting but rugged enough for indoor industrial environments. A perfect complement to the Zebra fixed RFID readers, the AN620 is ideal for use in wall mount, doorways, under counter, above counter as an RFID pad, on shelves, at the point of sale, or end-cap displays, or locations that have limited space like jewelry counters.



## AN620 Specifications

PHYSICAL CHARACTERISTICS	
<b>Polarization</b>	Left-hand circular
<b>Dimensions</b>	391 mm x 275 mm X 12 mm/ 15.39 in. x 10.82 in. x 0.47 in.
<b>Connector</b>	N-Type Female
<b>Connector Location</b>	Pigtail-Side
<b>Mounting Options</b>	Flush mount
<b>Weight</b>	1.0 kg/2.2 lbs
<b>Casing/Materials</b>	Aluminum with Kydex Casing
<b>Frequency Ranges</b>	EU: 865–868 MHz US: 902–928 MHz
<b>VSWR (Return Loss)</b>	1.4:1

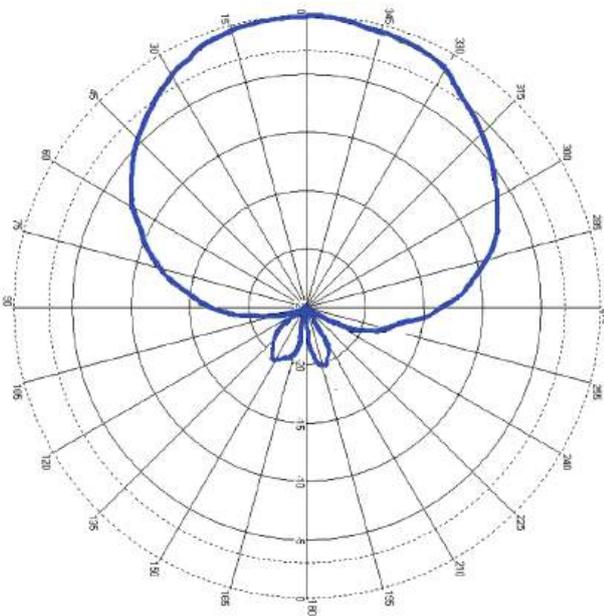
<b>Gain</b>	7.0 dBiC
<b>Front to Back Ratio</b>	22 dB
<b>3 dB Beam Width</b>	75° in horizontal plane, 48° in vertical plane
<b>Maximum Power</b>	6 Watts
<b>Axial Ratio</b>	less than 2 dB
<b>Operating Temperature</b>	-20° to +55°C/-4° to +131°F
<b>Storage Temperature</b>	-30° to +65°C/-22° to +149°F
<b>IP Sealing</b>	IP54
<b>Vibration</b>	IEC-68-2-6 (10 to 150 Hz, 0.5 g, one hour in each of two axes) (Random Vibration)
<b>Humidity</b>	IEC-68-2-30 (-13°F to 104°F, -25°C to 40°C) 24 hour cycles of 90% relative humidity

### Vertical Markets

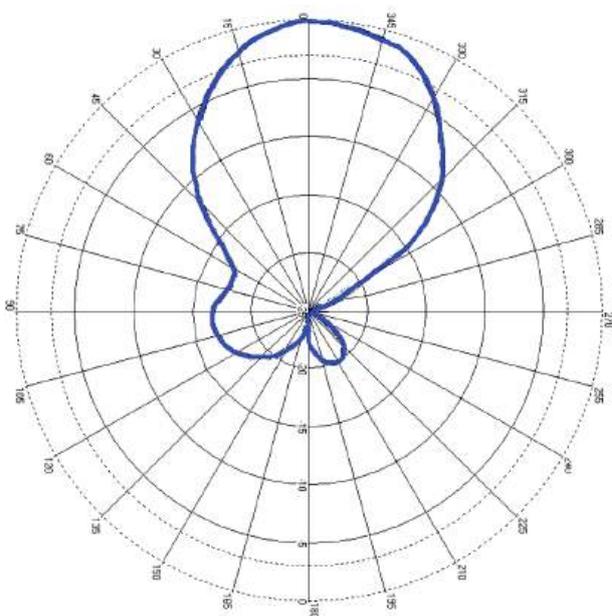
- Retail
- Enterprise/Office
- Data center
- Hospitality
- Healthcare

### Applications

- Point of sale
- Receiving dock doors
- Under the counter/ within shelving
- In server racks
- Inside medical cabinets



Horizontal (ETSI and FCC)

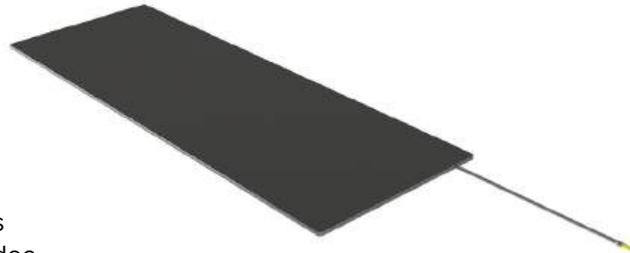


Vertical (ETSI and FCC)

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

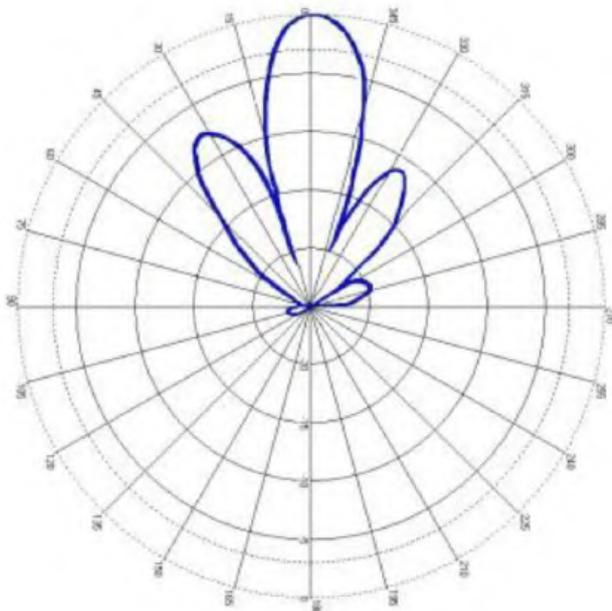
<b>Gain</b>	9 dBiC typical
<b>Front to Back Ratio</b>	24 dB
<b>3 dB Beam Width</b>	20° in xz-plane, 80° in yz-plane
<b>Maximum Power</b>	3 Watts
<b>Axial Ratio</b>	2 dB typical
<b>Operating Temperature</b>	-20° to +55°C/-4° to +131°F
<b>Storage Temperature</b>	-30° to +65°C/-22 to +149°F
<b>IP Sealing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

### Vertical Markets

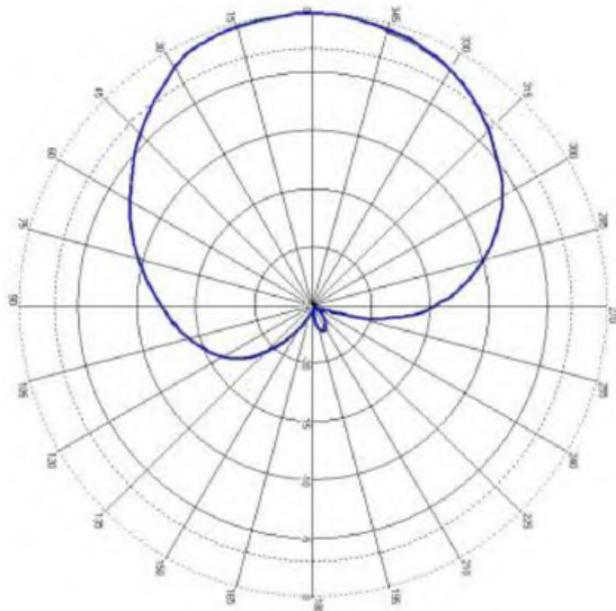
- Retail
- Enterprise/Office
- Data center
- Hospitality
- Healthcare

### Applications

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



XZ-Plane

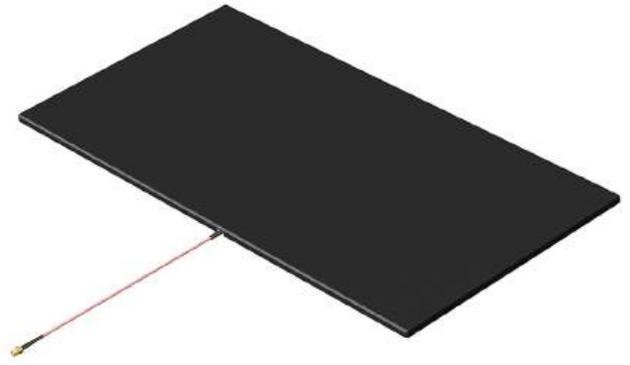


YZ-Plane

# Zebra AN660 Low-Profile, High-Gain RFID Antenna

Super-sleek form factor with high-gain performance for greater accuracy

The AN660 low-profile, high-gain RFID antenna is designed with a directed spatial range for specific, predictable readings. With exceptionally strong signal strength, the AN660 penetrates deeply into packaging for more accurate readings. Perfect for control points, the powerful beam delivers greater precision when reading tightly packed boxes and pallets.



## AN660 Specifications

PHYSICAL CHARACTERISTICS	
<b>Polarization</b>	Right-hand circular
<b>Dimensions</b>	604 x 304 x 8.6mm 23.78 in. x 11.97 in. x 0.34 in.
<b>Connector</b>	SMA Female Fly Lead
<b>Connector Location</b>	Side
<b>Mounting Options</b>	Integrated flush mounting holes or VESA mount
<b>Weight</b>	1.48 kg/3.3 lbs
<b>Casing/Materials</b>	Flame Retardant ABS
<b>Frequency Ranges</b>	EU: 865-868 MHz US: 902-928 MHz
<b>Gain</b>	10.5 dBiC

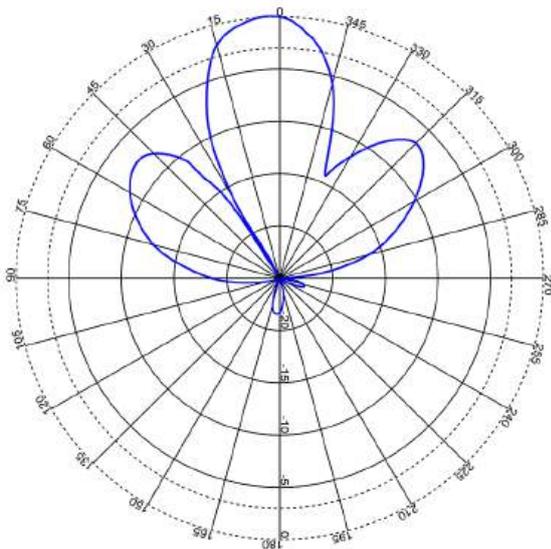
<b>VSWR (Return Loss)</b>	1.4 typical
<b>Front to Back Ratio</b>	-25 dB
<b>3 dB Beam Width</b>	25° in xz-plane, 60° in yz-plane
<b>Maximum Power</b>	3 Watts
<b>Axial Ratio</b>	2dB
<b>Operating Temperature</b>	20° to +55°C/-4° to +131°F
<b>Storage Temperature</b>	-30° to +60°C/-22° to +140°F
<b>IP Sealing</b>	IP54
<b>Nominal Impedance</b>	50 Ω
<b>Antenna Detection</b>	10K Ω resistance

### Vertical Markets

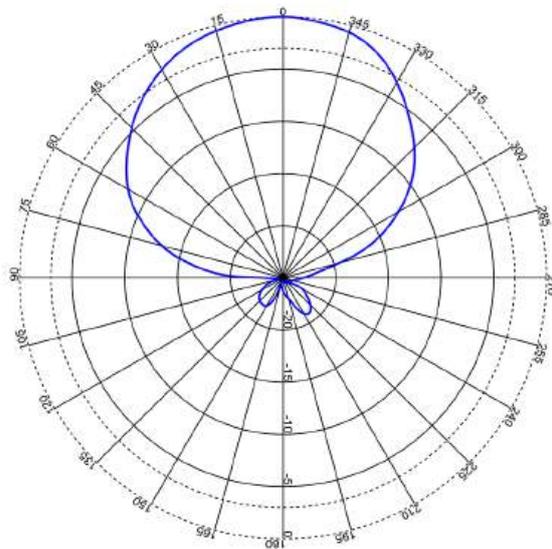
- Retail
- Transportation/Logistics
- Offices
- Hospitality
- Healthcare
- Data Center

### Applications

- Under the counter/within shelving
- In server racks
- Luggage tracking
- Receiving dock doors
- Conference/ attendee tracking



XZ-Plane

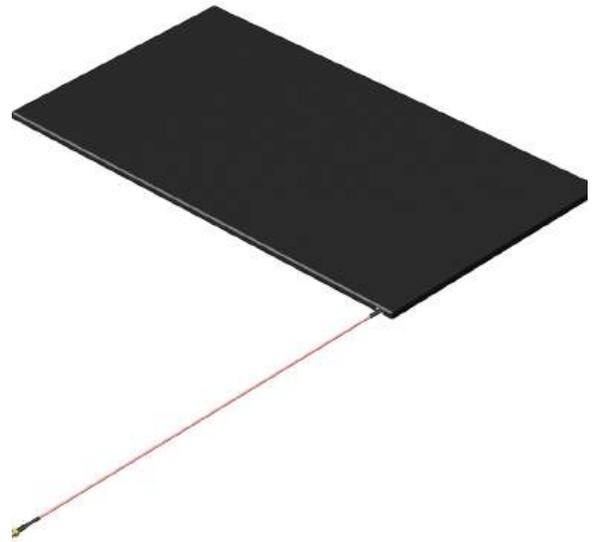


YZ-Plane

# Zebra AN670 Low-Profile, Near-Field RFID Antenna

Discreet form factor with near-field radiation for tighter zone control

The AN670 low-profile, near-field RFID antenna is designed with a tightly constrained spatial range for precise control, allowing you to read assets within a specific proximity. It also has increased power density that allows you to read a broader range of product types. Its ultrathin, 1/3" profile means it can be used in even the smallest settings without being noticed.



## AN670 Specifications

PHYSICAL CHARACTERISTICS	
<b>Polarization</b>	Near-Field
<b>Dimensions</b>	604 x 304 x 8.5mm 23.77 in. x 11.96 in. x 0.33 in.
<b>Connector</b>	SMA Female Fly Lead
<b>Connector Location</b>	Side
<b>Mounting Options</b>	Integrated flush mounting holes or VESA mount
<b>Weight</b>	1.18 kg/2.59 lbs
<b>Casing/Materials</b>	Flame Retardant ABS
<b>Frequency Ranges</b>	EU: 865-867 MHz US: 902-928 MHz

<b>VSWR (Return Loss)</b>	1.95 typical
<b>Maximum Power</b>	3 Watts
<b>Operating Temperature</b>	0° to +50°C/+32° to +122°F
<b>Storage Temperature</b>	-30° to +50°C/-22° to +122°F
<b>IP Sealing</b>	IP54
<b>Nominal Impedance</b>	50 Ω
<b>Antenna Detection</b>	10K Ω resistance

### Vertical Markets

- Retail
- Offices
- Hospitality
- Healthcare

### Applications

- Point of sale
- Under the counter
- Within shelving
- Inside medical cabinets

# Zebra AN720 Compact, Rugged RFID Antenna

Compact antenna for rugged and outdoor environments

The AN720, with an IP67 rating, is at home indoors or out—suited for customer facing, rugged and outdoor environments, shopping areas, receiving dock doors and ceilings, as well as out on the tarmac, and on conveyor belts to name a few. The outer housing is designed to be sleek and discreet enough to be at home in any business but rugged enough for outdoor industrial environments.



## AN720 Specifications

PHYSICAL CHARACTERISTICS	
<b>Polarization</b>	Left-hand circular
<b>Dimensions</b>	132.8 mm x 132.8 mm x 18.1 mm/ 5.2 in. x 5.2 in. x 0.7 in.
<b>Connector</b>	N-Type Female
<b>Connector Location</b>	Rear
<b>Mounting Options</b>	Articulating mounting bracket included
<b>Weight</b>	0.37 kg/0.8 lbs
<b>Casing/Materials</b>	Aluminum with white plastic cover
<b>Frequency Ranges</b>	EU: 865–868 MHz US: 902–928 MHz
<b>VSWR (Return Loss)</b>	1.5:1

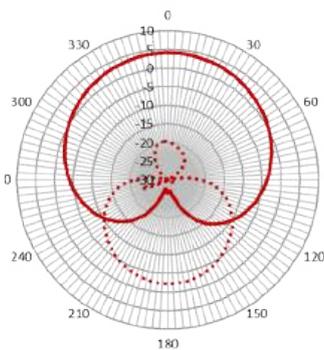
<b>Gain</b>	US/Canada: 3.0 dBiL; EU: 3.5 dBiL
<b>Front to Back Ratio</b>	8 dB
<b>3 dB Beam Width</b>	100° in both planes
<b>Maximum Power</b>	10 Watts
<b>Axial Ratio</b>	2 dB
<b>Operating Temperature</b>	-25° to +70°C/-13° to +158°F
<b>Storage Temperature</b>	-40° to +70°C/-40° to +158°F
<b>IP Sealing</b>	IP67
<b>Vibration</b>	MIL-STD-810
<b>Humidity</b>	IEC-68-2-30

### Vertical Markets

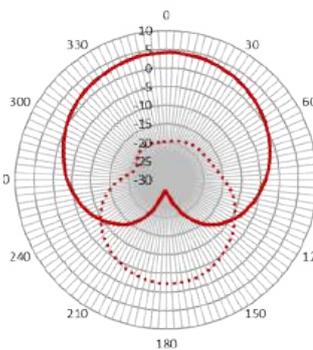
- Retail
- Enterprise/Office
- Hospitality
- Healthcare
- Transportation & Logistics

### Applications

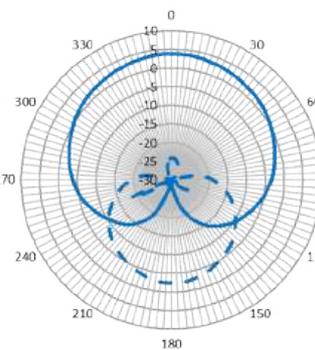
- Point of sale
- Conveyor belts
- Control points
- Hallways



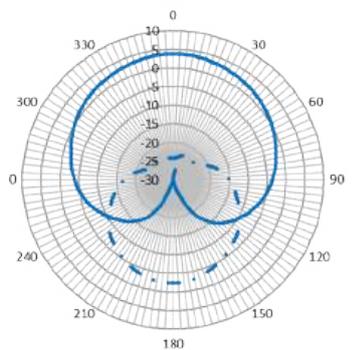
Horizontal (FCC)



Vertical (FCC)



Horizontal (ETSI)



Vertical (ETSI)

# Zebra SR5502 Backroom and Warehouse RFID Antenna

Dual RFID antenna to track inventory in the backroom from “arrival to departure”

Start the tracking cycle by detecting and recording the movement of RFID-tagged inventory from the moment it enters your backroom to the moment it leaves. Handle high tag volumes with increased accuracy and read rates. Installation is simple—just mount the supplied bracket and insert the Backroom SmartLens Sensor. Eliminate the need to install power outlets with Power-over-Ethernet (PoE)—ideal for typical complex backroom environments. Easily deploy by just turning on the device and you’re up and running.



## SR5502 Specifications

PHYSICAL CHARACTERISTICS	
<b>Polarization</b>	Left-hand circular
<b>Dimensions</b>	432 mm x 254 mm x 178 mm/ 17.0 in. x 10.0 in. x 7.00 in.
<b>Connector</b>	N-Type Female x 2
<b>Connector Location</b>	Rear
<b>Mounting Options</b>	Integrated mounting bracket
<b>Weight</b>	2.5 kg/5.5 lbs
<b>Casing/Materials</b>	Aluminum with white plastic cover

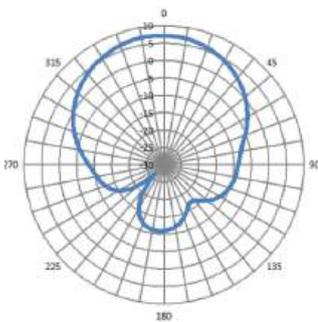
<b>Frequency Ranges</b>	865–956 MHz
<b>Gain</b>	US: 6.7 dBiL; EU: 2 dBiL
<b>3 dB Beam Width</b>	83° x 84°/71° x 67°
<b>Maximum Power</b>	18 Watts (37-55 VDC POE)
<b>Operating Temperature</b>	-20° to +55°C/-4° to +131°F
<b>Storage Temperature</b>	-40° to +70°C/-40° to +158°F
<b>Humidity</b>	95% RH non-condensing

### Vertical Markets

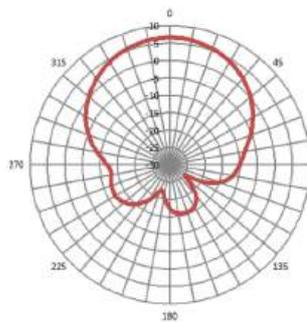
- Retail
- Warehouse Management
- Manufacturing

### Applications

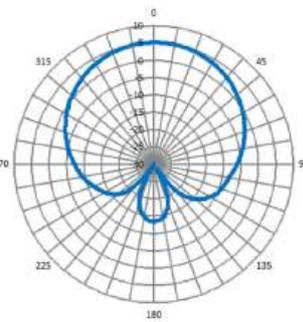
- Stock room aisles
- Flush mount ceiling or wall applications
- Receiving and staging areas
- Open work areas



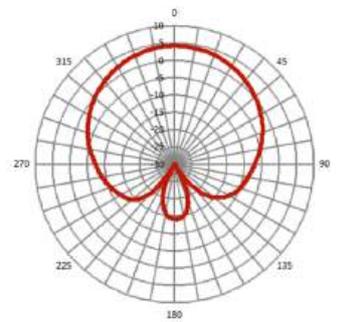
Horizontal (FCC)



Vertical (FCC)



Horizontal (ETSI)



Vertical (ETSI)

# Zebra SP5504 Point of Sale (POS) RFID Antenna

Track inventory in your POS lanes or will-call areas

This sensor logs items passing through your POS lanes, through will-call areas and omnichannel pickup—anywhere you want to track inventory in an area with limited space. A cost-effective solution with a highly localized antenna technology, a Zebra SP5504 Point of Sale (POS) RFID Antenna can be installed in multiple places without risking interference.

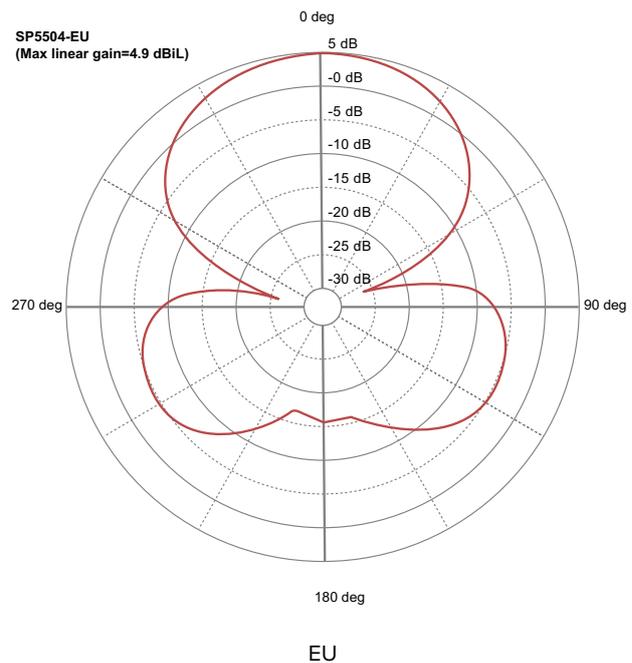
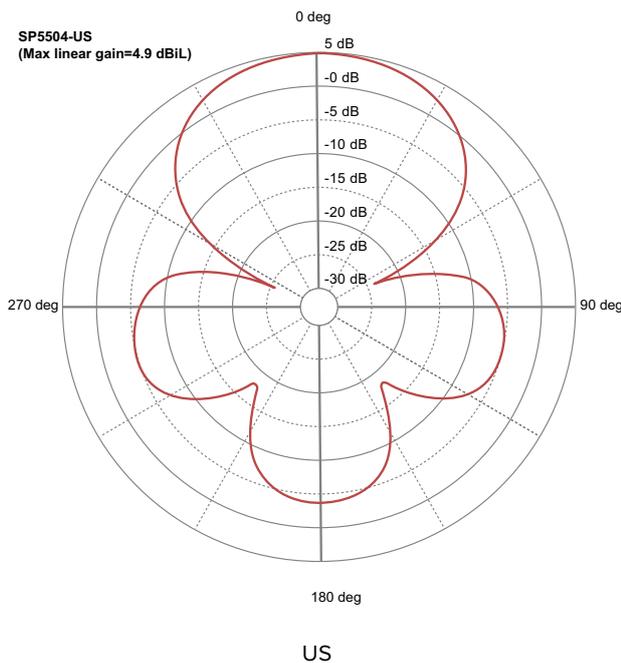


## SP5504 Specifications

PHYSICAL CHARACTERISTICS	
<b>Polarization</b>	Left-hand circular
<b>Dimensions</b>	184 mm x 184 mm diameter/ 7.0 in. x 7.3 in. diameter
<b>Connector</b>	N-Type Female
<b>Connector Location</b>	Top
<b>Mounting Options</b>	Accessory pole available
<b>Weight</b>	1.0 kg/2.2 lbs
<b>Casing/Materials</b>	Aluminum diecast w/white plastic cover
<b>Frequency Ranges</b>	865 to 868 MHz or 902 to 928 MHz

<b>VSWR (Return Loss)</b>	1.5:1
<b>Gain</b>	4.9 dB dBiL
<b>3 dB Beam Width</b>	63°/60°
<b>Maximum Power</b>	13 Watts (37-55 VDC POE)
<b>Operating Temperature</b>	0° to +50°C/32° to +122°F
<b>Storage Temperature</b>	-40° to +70°C/-40° to +158°F
<b>Humidity</b>	95% RH non-condensing

- Vertical Markets**
- Retail
  - Warehouse Management
  - Manufacturing
- Applications**
- Point of sale
  - BOPIS or staging areas
  - Fitting rooms



# Zebra SN5604 SmartLens™ Gen II Retail Sensors

Track inventory on the sales floor

The SNAP (Sensing Network Appliance) SmartLens Sensor is loaded with the technology you need to obtain real-time visibility into what is happening on your sales floor. Track the movement of items with the integrated high-performance RFID reader. These overhead sensors are designed to accommodate different store ceiling types and heights. And sensor housings can be customized to complement your store's architecture and aesthetics.



## SN5604 Specifications

PHYSICAL CHARACTERISTICS	
Dimensions	541 mm diameter x 197 mm 21.3 in. diameter x 7.8 in.
Ethernet Ports	Input: Ethernet auto sensing/negotiation 802.3af/at compliant port for SNAP communication and power supply
Weight	4.8 kg/10.5 lbs
Frequency Ranges	EU: 865-868 MHz/N Am./ US: 902-928 MHz
Air Protocols	EPCglobal UHF Class 1 Gen2 ISO 18000-6C
Radiated Power	Up to 4W EIRP
Memory	Flash 512 MB; DRAM 256 MB

Management Protocols	RM 1.0.1 (with XML over HTTP/HTTPS and SNMP binding); RDMP Network services: DHCP, HTTPS, FTPS, SFPT, SSH, HTTP, FTP, SNMP and NTP
Network Stack	IPv4 and IPv6
Security	Transport Layer Security Ver 1.2, FIPS-140
Operating Temperature	0° to 50°C/23° to 121°F
Storage Temperature	-40° to +70°C/-40° to 158°F
Humidity	85% RH, non-condensing at 70° C
ESD	± 8 kV air discharge; ± 6 kV contact discharge

### Automated inventory tracking

- Real-time inventory
- Product location
- Dynamic replenishment
- POD/delivery validation
- Vendor compliance
- Planogram compliance
- Markdown management

### In-store fulfillment

- Click and collect/BPOIS/  
reserve
- Ship from store
- Optimize picking process

### Asset protection

- Point of sale bypass  
detection
- Administrative shrink
- Identify return fraud
- Asset tracking

For more information on Zebra RFID Antennas,  
please visit [zebra.com/rfid-antennas](https://zebra.com/rfid-antennas)



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