ZEBRA

Zebra UHF RFID Antenna Selection

June 5, 2025

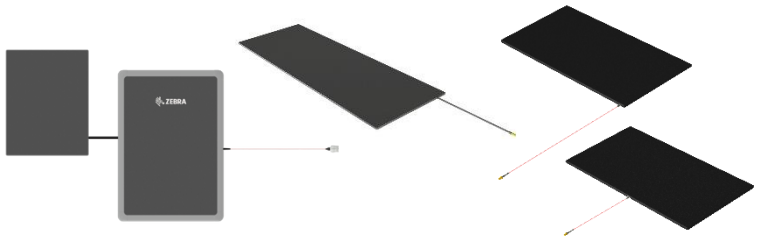
Zebra Antenna Solution Set

Zebra antenna portfolio offers versatility and performance to meet your diverse application needs

All antennas can be used for global operation.

General Purpose

Low Profile



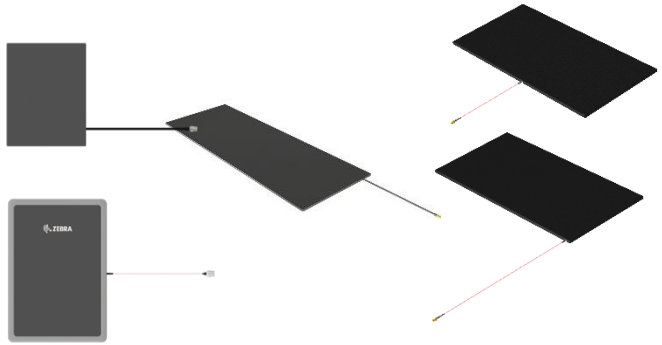
Use Case Specific

Zebra Offers	
AN440	Dual-element, highly efficient high-performance area antenna, ideally suited for bi-static operation
AN480	Versatile, wide-band, high-performance, general-purpose antenna
AN510	Ultra-rugged and low-profile for use indoors and outdoors
AN520	Small form factor and high performance
AN610	Low-profile flat panel aesthetic antenna–Small
AN620	Ultra-low-profile flat panel aesthetic antenna–Large
AN650	Rugged and ultra-low-profile
AN660	Low-profile, high-gain antenna
AN670	Low-profile, near-field antenna
AN720	Compact indoor/outdoor antenna
SP5504	Point of Sale (POS) RFID antenna
SR5502	Transition point RFID antenna

Choose the Right Antenna for Your Application

General Purpose

Low Profile



Use Case Specific

RFID Antennas	AN440	AN480	AN510	AN520	AN610	AN620	AN650	AN660	AN670	AN720	SP5504	SR5502
Manufacturing	•	•	•	•	•	•				•	•	•
T&L	•	•	•					•		•		
Retail			•					•	•	•		
Warehouse	•	•	•	•	•	•				•		
Field Mobility	•	•	•									
Hospitality							•	•	•			
Healthcare							•	•	•			

How Do I Determine Which Antenna is Right for My Application?

Antenna selection should comprise a judicious analysis of performance and environmental specifications:

- **Environment**
  (Indoor/outdoor, and other extreme requirements such as rain, freezer, moisture, humidity, high temperature, etc.)
- **Frequency band**
- **Gain**
- **Beam-width**
- **Form-factor**
- **Polarization requirements**

One antenna set may provide significant advantage to those characteristics applicable to your environment.

Read range is determined by a number of factors including reader, tag, antenna and environmental factors.

Zebra AN440 Dual-Element RFID Antenna

AN440

Description	• Large area coverage for high-capacity, high-throughput environments • Easy to mount on ceilings and walls • Dual-element antenna can be used around stockroom shelves, warehouse doorways and dock doors
Features	• Wide read field and high-speed RF signal conversion enable fast and accurate data capture
Applications	• Point of sale • Conveyor belts • Control points • Hallways • Dock doors

Physical	**Dimensions Without Mounting Screws**	575.1 mm L x 259.1 mm W x 33.52 mm D 22.6 in. L x 10.2 in. W x 1.32 in. D	
	Connector	Dual N-Type Female	
	Connector Position	Rear	
	Mounting Options	Mounting studs provided	
	Weight	3.2 kg/7.0 lbs	
	Casing/Materials	UV Stable ASA	
Operational	**Frequency Ranges**	EU: 865–868 MHz	US: 902–928 MHz
	Gain	US/Canada: 6.0 dBiL	
	VSWR (Return Loss)	1.22:1	
	Front-to-Back Ratio	20 dB	
	Polarization	1 x left-hand circular/1 x right-hand circular	
	3 dB Beam Width	70° in both planes	
	Maximum Power	10 Watts	
	Axial Ratio	1 dB typical	
Environmental	**Operating Temperature**	-30° to +70°C	-22° to +158°F
	IP Sealing	IP67	
	Storage Temperature	-40° to +85°C	-40° to +185°F
	Vibration	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)	
	Humidity	IEC-68-2-30 (-13° to 104°F/-25° to 40°C 24-hour cycles of 90% relative humidity)	

Zebra AN480 Wide-Band RFID Antenna

AN480

Description	• All-purpose, high-performance antenna can be used in indoor settings either in business or industrial environments. If using outdoors, make sure it is not directly under rain or snow. • Convenience of a versatile antenna for most general-purpose applications
Features	• Wide frequency band antenna response covering 865 MHz ~ 956 MHz, ideally suited for global deployments • Available in right- and left-hand polarization
Applications	• Ceilings and walls to create superior read zones around shelves • Doorways and chokepoints where boxes and pallets are moving through • Portals, outdoor gates and conveyors • Indoor and outdoor applications
Mounting	• Compatible with all bracket and mounting options • Brackets and mounts are separately available for the AN480

Physical	**Dimensions Without Mounting Screws**	259.1 mm L x 259.1 mm W x 33.5 mm D 10.2 in. L x 10.2 in. W x 1.32 in. D	
	Connector	N-Type Female	
	Connector Location	Rear	
	Mounting Options	Mounting studs provided	
	Weight	1.13 kg/2.5 lbs	
	Casing/Materials	Aluminum with white plastic cover	
Operational	**Frequency Range**	865–956 MHz	
	Gain	6.0 dBiL	
	VSWR (Return Loss)	1.3:1	
	Front-to-Back Ratio	18 dB	
	Polarization	Left-hand circular or right-hand circular	
	3 dB Beam Width	65° in both planes	
	Maximum Power	2 Watts	
	Axial Ratio	1.5 dB typical	
Environmental	**Operating Temperature**	-25° to +70°C	-13° to +158°F
	IP Sealing	IP54	
	Storage Temperature	-40° to +70°C	-40° to +158°F
	Vibration	IEC-68 series	
	Humidity	IEC-68-2-30	

Zebra AN510 Ultra-Rugged RFID Antenna

AN510

Description	• Ultra-rugged, low-profile antenna • IP67 rated for use in indoor and outdoor applications • Sleek antenna can be used in any business but rugged enough for outdoor industrial environments including outdoor shopping areas, receiving dock doors, ceilings, out on the tarmac, and on conveyor belts
Features	• Versatile flush and VESA-studded mounting options make installation and mounting simple
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

Physical	**Dimensions Without Mounting Screws**	250 mm L x 250 mm W x 14 mm D 9.85 in. L x 9.85 in. W x 0.55 in. D	
	Connector	SMA Female	
	Connector Location	Side-mounted	
	Mounting Options	Flush mount or VESA mount	
	Weight	0.75 kg/1.6 lbs	
	Casing/Materials	UV-resistant ABS	
Operational	**Frequency Ranges**	EU: 865–868 MHz	US: 902–928 MHz
	Gain	8.5 dBic	
	VSWR (Return Loss)	1.3:1	
	Front-to-Back Ratio	20 dB	
	Polarization	Right-hand circular	
	3 dB Beam Width	68° in both planes	
	Maximum Power	3 Watts	
	Axial Ratio	1 dB	
Environmental	**Operating Temperature**	-20° to +55°C	-4° to +131°F
	IP Sealing	IP67	
	Storage Temperature	-30° to +65°C	-22° to +149°F
	Vibration	MIL-STD-810G	
	Humidity	72-hours at 85°C relative humidity	

Zebra AN520 Ultra-Rugged RFID Antenna

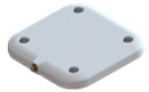
AN520

Description	• Ultra-rugged, low-profile antenna • IP68 rated for use in indoor and outdoor applications • High-performance antenna with small form factor sleek and discreet enough to be integrated into any business, but rugged enough for outdoor industrial environments
Features	• Versatile flush mount blends into any location
Applications	• Point-of-sale • Under-the-counter/within shelving • In server racks • Inside medical cabinets • Luggage tracking • Access control • Manufacturing line • Receiving dock doors

Physical	**Dimensions Without Mounting Screws**	150 mm L x 150 mm W x 14 mm D 5.9 in. L x 5.9 in. W x 0.55 in. D	
	Connector	SMA Female	
	Connector Location	Side connector	
	Mounting Options	Flush mount	
	Weight	0.25 kg/0.55 lbs	
	Casing/Materials	UV-resistant ABS	
Operational	**Frequency Range**	EU: 864–868 MHz	US: 902–928 MHz
	Gain	5.5 dBiC typical	
	VSWR (Return Loss)	1.4 typical	
	Front-to-Back Ratio	-10 dB	
	Polarization	RHCP (Right-Hand Circular Polarized)	
	3 dB Beam Width	115° in both planes	
	Maximum Power	3 Watts	
	Axial Ratio	2 dB typical	
Environmental	**Operating Temperature**	-40° to +65°C	-40° to +149°F
	IP Sealing	IP68	
	Storage Temperature	-40° to +65°C	-40° to +149°F
	Vibration	IEC-60068-2-64	
	Humidity	72-hour at 85°C relative humidity	

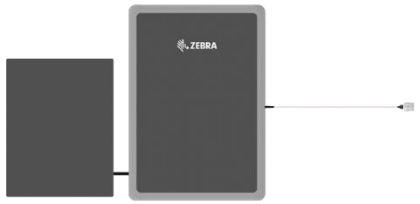
General Purpose Antenna Specifications



	AN440 Dual-Element RFID Antenna	AN480 Wide-Band RFID Antenna	AN510 Ultra-Rugged RFID Antenna	AN520 Ultra-Rugged RFID Antenna
Dimensions Without Mounting Screws:	575.1 mm L x 259.1 mm W x 33.52 mm D 22.6 in. L x 10.2 in. W x 1.32 in. D	259.1 mm L x 259.1 mm W x 33.5 mm D 10.2 in. L x 10.2 in. W x 1.32 in. D	250 mm L x 250 mm W x 14 mm D 9.85 in. L x 9.85 in. W x 0.55 in. D	150 mm L x 150 mm W x 14 mm D 5.9 in. L x 5.9 in. W x 0.55 in. D
Connector	Dual N-Type Female	N-Type Female	SMA Female	SMA Female
Connector Location	Rear	Rear	Side-mounted	Side connector
Mounting Options	Mounting studs provided	Mounting studs provided	Flush mount or VESA mount	Flush mount
Weight	3.2 kg/7.0 lbs	1.13 kg/2.5 lbs	0.75 kg/1.6 lbs	0.25 kg/0.55 lbs
Casing/Materials	UV Stable ASA	Aluminum with white plastic cover	UV-resistant ABS	UV-resistant ABS
Frequency Range	US: 902–928 MHz	865–956 MHz	EU: 865–868 MHz US: 902–928 MHz	EU: 864–868 MHz US: 902–928 MHz
Gain	6.0 dBiL	6.0 dBiL	8.5 dBic	5.5 dBiC typical
VSWR (Return Loss)	1.22:1 (20 dB)	1.3:1	1.3:1	1.4 typical
Front-to-Back Ratio	20 dB	18 dB	20 dB	-10 dB
Polarization	1 x left-hand circular/1 x right-hand circular	Left-hand circular or right-hand circular	Right-hand circular	RHCP (Right-Hand Circular Polarized)
3 dB Beam Width	70° in both planes	65° in both planes	68° in both planes	115° in both planes
Maximum Power	10 Watts	2 Watts	3 Watts	3 Watts
Axial Ratio	1 dB typical	1.5 dB typical	1 dB	2 dB typical
Operating Temperature	-30° to +70°C -22° to +158°F	-25° to +70°C -13° to +158°F	-20° to +55°C -4° to +131°F	-40° to +65°C -40° to +149°F
IP Sealing	IP67	IP54	IP67	IP68
Storage Temperature	-40° to +70°C -40° to +158°F	-40° to +70°C -40° to +158°F	-30° to +65°C -22° to +149°F	-40° to +65°C -40° to +149°F
Vibration	IEC-68-2-6 (10 to 150 Hz, 0.5 g, 1 hour in each of 2 axes–random Vibration)	IEC-68 series	MIL-STD-810G	IEC-60068-2-64
Humidity	IEC-68-2-30 (77° to 104°F/-25° to 40°C 24-hour cycles of 90% relative humidity	IEC-68-2-30	72 hours at 85°C relative humidity	72 hours at 85°C relative humidity

Zebra AN610 and AN620 Low-Profile Antennas

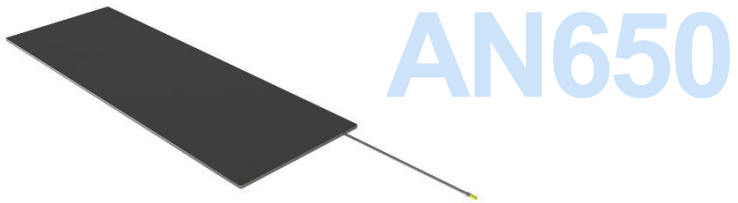


AN610
AN620

Description	• Ultra-low-profile flat panel aesthetic antenna
Features	• Sleek, rectangular circularly or near-field polarized antenna
Applications	• Suitable for use in indoor environments: wall mount, doorways, under counter, above counter as an RFID pad, on shelves, on end-cap displays, POS, etc.
Mounting	• Integrated mounting holes • Comes with mounting hardware for flat panel mounting • Comes with 1 ft. of pigtail cable, compatible with Zebra's standard antenna cables for extension

		AN610 Low-Profile Antenna		AN620 Low-Profile Antenna	
Physical	**Dimensions (in./mm)**	10.8 in. L x 8.42 in. W x 0.47 in. D 275 mm L x 214 mm W x 12 mm D		15.39 in. L x 10.82 in. W x 0.47 in. D 391 mm L x 275 mm W x 12 mm D	
	Connector	N-Type Female		N-Type Female	
	Connector Location	Side		Side	
	Mounting Options	Integrated mounting holes		Integrated mounting holes	
	Weight	1.3 lbs/0.6 kg		2.2 lbs/1.0 kg	
	Casing/Materials	Superior Kydex		Superior Kydex	
Operational	**Frequency Range**	EU: 864–868 MHz	US: 902–928 MHz	EU: 864-868 MHz	US: 902-928 MHz
	Gain	1.0 dBiL		4.0 dBiL	
	VSWR (Return Loss)	1.4:1		1.4:1	
	Front-to-Back Ratio	18 dB		22 dB	
	Polarization	LHCP		LHCP	
	3 dB Beam Width	80° in both phases		75° in both phases	
	Maximum Power	6 Watts		6 Watts	
	Axial Ratio	< 2 dB		< 2 dB	
Environmental	**Operating Temperature**	-4° to +131°F	-20° to +55°C	-4° to +131°F	-20° to +55°C
	IP Sealing	IP -65		IP -65	
	Storage Temperature	-22° to +149°F	-30° to +65°C	-22° to +149°F	-30° to +65°C
	Vibration	IEC-68-2-6 (10 to 150 Hz, 0.5 g, 1 hour in each of 2 axes–random Vibration)		IEC-68-2-6 (10 to 150 Hz, 0.5 g, 1 hour in each of 2 axes–random Vibration)	
	Humidity	IEC-68-2-30 (-13° to 104° F/-25° to 40°C 24-hour cycles of 90% relative humidity)		IEC-68-2-30 (-13° to 104° F/-25° to 40°C 24-hour cycles of 90% relative humidity)	

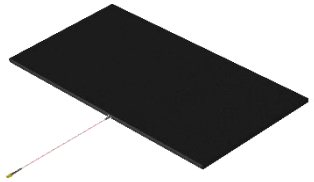
Zebra AN650 Rugged and Ultra-Low-Profile RFID Antenna



Description	• Ultra-low-profile flat panel aesthetic antenna
Features	• Sleek, rectangular circularly or near-field polarized antenna
Applications	• Suitable for use in indoor environments: wall mount, doorways, under counter, above counter as an RFID pad, on shelves, on end-cap displays, POS, etc.
Mounting	• Integrated mounting holes • Comes with mounting hardware for flat panel mounting • Comes with 1 ft. of pigtail cable, compatible with Zebra's standard antenna cables for extension

Physical	**Dimensions Without Mounting Screws**	915 mm x 305 mm x 8 mm D	
		36.02 in. x 12.00 in. x 0.31 in. D	
	Connector	SMA Female	
	Connector Position	Side fly lead (300 mm/1 ft.)	
	Mounting Options	Flush mount	
	Weight	2.4 kg/5.29 lbs Gross: 2.8 kg/6.17 lbs	
	Casing/Materials	Fire-retardant ABS	
Operational	**Frequency Ranges**	EU: 865–868 MHz	US: 902–928 MHz
	Gain	9 dBiC typical	
	VSWR (Return Loss)	1.4 typical	
	Front-to-Back Ratio	24 dB	
	Polarization	RHCP	
	3 dB Beam Width	20° in xz-plane, 80° in yz-plane	
	Max Power	3 Watts	
	Axial Ratio	2 dB	
Environmental	**Oper. Temps**	-4° to +131°F	-20° to +55°C
	IP Sealing	IP65	
	Storage Temperature	-22° to +149°F	-30° to +65°C
	Nominal Impedance	50 Ω	
	Antenna Detection	10 K Ω resistance	

Zebra AN660 Low-Profile, High-Gain Antenna

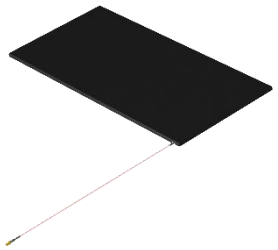


AN660

Description	• Integrated high-performance RFID reader tracks the movement of items • Obtain real-time visibility into what is happening on your sales floor
Features	• Designed to accommodate different store ceiling types and heights • Sensor housings can be customized to complement your store's architecture and aesthetics
Applications	• Automated inventory tracking • In-store fulfillment • Asset protection

Physical	**Polarization**	Right-hand circular	
	Dimensions Without Mounting Screws	604 mm x 304 mm x 8.6 mm	
		23.78 in. x 11.97 in. x 0.34 in.	
	Connector	SMA Female Fly Lead	
	Connector Location	Side	
	Mounting Options	Integrated flush mounting holes with VESA mount	
	Weight	1.48 kg/3.3 lbs	
	Casting/Materials	Flame retardant ABS	
Operational	**Frequency Range**	EU: 865–868 MHz	US: 902–928 MHz
	Gain	10.5 dBiC	
	VSWR (Return Loss)	1.4 typical	
	Front-to-Back Ratio	-25 dB	
	3 dB Beam Width	25° in xz-plane, 60° in yz-plane	
	Maximum Power	3W	
	Axial Ratio	2 dB typical	
Environmental	**Operating Temperature**	-20° to +55°C	-4° to +131°F
	Storage Temperature	-30° to +60°C	-22° to +140°F
	IP Sealing	IP54	
	Nominal Impedence	50 Ω	
	Antenna Detection	10 K Ω Resistance	

Zebra AN670 Low-Profile, Near-Field Antenna



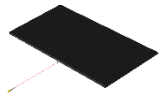
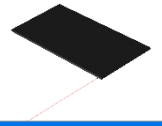
AN670

Description	• Ultra-low-profile, near-field antenna • Obtain precise control to read assets within a specific proximity
Features	• Designed with a tightly constrained spatial range • Increased power density allows you to read a broader range of product types
Applications	• Point of sale • Under the counter • Within shelving • Inside medical cabinets

Physical	**Dimensions Without Mounting Screws**	604 mm x 304 mm x 8.5 mm	
		23.77 in. x 11.96 in. x 0.33 in.	
	Connector	SMA Female Fly Lead	
	Connector Location	Side	
	Mounting Options	Integrated flush mounting holes with VESA mount	
	Weight	1.18 kg/2.59 lbs	
	Casting/Materials	Flame retardant ABS	
Operational	**Frequency Range**	EU: 865–868 MHz	N Am./US: 902–928 MHz
	VSWR (Return Loss)	1.95 typical	
	Maximum Power	3W	
Environmental	**Operating Temperature**	0° to +50°C	32° to +122°F
	Storage Temperature	-30° to +50°C	-22° to +122°F
	IP Sealing	IP54	
	Nominal Impedence	50 Ω	
	Antenna Detection	10 K Ω Resistance	

Antenna Specifications



	AN610 Low-Profile Antenna	AN620 Low-Profile Antenna	AN650 Rugged and Ultra-Low-Profile Antenna	AN660 Low-Profile Antenna	AN670 Low-Profile Antenna
Dimensions (mm/in.)	275 mm L x 214 mm W x 12 mm D 10.8 in. L x 8.42 in. W x 0.47 in. D	391 mm L x 275 mm W x 12 mm D 15.39 in. L x 10.82 in. W x 0.47 in. D	915 mm L x 305 mm W x 8 mm D 36.702 in. L x 12.00 in. W x 0.31 in. D	604 mm L x 304 mm W x 8.6 mm D 23.78 in. L x 11.97 in. W x 0.34 in. D	604 mm L x 304 mm W x 8.5 mm D 23.77 in. L x 11.96 in. W x 0.33 in. D
Connector	N-Type Female	N-Type Female	SMA Female Fly Lead	SMA Female Fly Lead	SMA Female Fly Lead
Connector Location	Side	Side	Side	Side	Side
Mounting Options	Integrated mounting holes	Integrated mounting holes	Integrated flush mounting holes	Integrated flush mounting holes or VESA mount	Integrated flush mounting holes or VESA mount
Weight	0.6 kg/1.3 lbs.	1.0 kg/2.2 lbs.	2.4 kg/5.29 lbs.	1.8 kg/3.3 lbs.	1.18 kg/2.59 lbs.
Casing/Materials	Superior Kydex	Superior Kydex	Flame Retardant ABS	Flame Retardant ABS	Flame Retardant ABS
Frequency Range	EU: 864–868 MHz US: 902–928 MHz	EU: 864–868 MHz US: 902–928 MHz	EU: 865–867 MHz US: 902–928 MHz	EU: 865–868 MHz US: 902–928 MHz	EU: 865–867 MHz US: 902–928 MHz
Gain	1.0 dBiL	4.0 dBiL	9.0 dBiC typical	10.5 dBiC	N/A
VSWR (Return Loss)	1.4: 1	1.4: 1	1.4 typical	1.4 typical	1.95 typical
Front-to-Back Ratio	18 dB	22 dB	24 dB	-25 dB	N/A
Polarization	Left-hand circular	Left-hand circular	Right-hand circular	N/A	Near-field
3 dB Beam Width	80° in both phases	75° in both phases	20° in xz-plane, 80° in yz-plane	25° in xz-plane, 60° in yz-plane	N/A
Maximum Power	6 Watts	6 Watts	3 Watts	6 Watts	3 Watts
Axial Ratio	< 2 dB	< 2 dB	2 dB typical	2 dB typical	N/A
Nominal Impedance	N/A	N/A	50 Ω	50 Ω	50 Ω
Antenna Detection	N/A	N/A	10 K Ω resistance	10 K Ω resistance	10 K Ω resistance
Operating Temperature	-20° to +55°C -4° to +131°F	-20° to +55°C -4° to +131°F	-20° to +55°C -4° to +131°F	20°C to +55°C -4° to +131°F	0° to +50°C +32° to +122°F
IP Sealing	IP -65	IP -65	IP -65	IP 54	IP 54
Storage Temperature	-30° to +65°C -22° to +149°F	-30° to +65°C -22° to +149°F	-30° to +65°C -22° to +149°F	-30°C to +60°C -22° to +140°F	-30° to +50°C -22° to +122°F
Vibration	IEC-68-2-6 (10 to 150 Hz, 0.5 g, 1 hour in each of 2 axes–random vibration)	IEC-68-2-6 (10 to 150 Hz, 0.5 g, 1 hour in each of 2 axes–random vibration)	N/A	N/A	N/A
Humidity	IEC-68-2-30 (77° to 104° F/-25° to 40°C 24-hour cycles of 90% relative humidity)	IEC-68-2-30 (77° to 104° F/-25° to 40°C 24-hour cycles of 90% relative humidity)	N/A	N/A	N/A

Zebra AN720 Rugged Indoor and Outdoor RFID Antenna

AN720

Description	• Industrial, rugged, small form-factor, wide-beam width antenna • Ideal for indoor or outdoor use in harsh environments such as: dock doors, gated access control, outdoor storage locations, etc.
Features	• Industrial class, IP67 rated • Wide beam-width of 100 degrees for wider coverage • Ideal for short-range applications to create targeted zones
Applications	• Suitable for use in indoor and outdoor environments • Indoors: doorways, shelves, end-cap displays • Outdoors: doorways, small conveyors

Physical	**Dimensions Without Mounting Screws**	132.8 mm L x 132.8 mm W x 18.1 mm D 5.2 in. L x 5.2 in. W x 0.7 in. D	
	Dimensions with mounting screws	N/A	
	Connector	N-Type Female	
	Connector Location	Rear	
	Mounting Options	Articulating mounting bracket included	
	Weight	0.37 kg/0.8 lbs	
	Casing/Materials	Aluminum with white plastic cover	
Operational	**Frequency Range**	EU: 865–868 MHz	US: 902–928 MHz
	Gain	EU: 3.5 dBiL	US/Canada: 3.0 dBiL
	VSWR (Return Loss)	1.5:1	
	Front-to-Back Ratio	8 dB	
	Polarization	Left-hand circular	
	3 dB Beam Width	100° in both planes	
	Max Power	10 Watts	
	Axial Ratio	2 dB	
Environmental	**Operating Temperature**	-25° to +70°C	-13° to +158°F
	IP Sealing	IP67	
	Storage Temperature	-40° to +70°C	-40° to +158°F
	Vibration	MIL-STD-810	
	Humidity	IEC-68-2-30	

Zebra SP5504 Point of Sale (POS) RFID Antenna

SP5504

Description	• Highly localized sensor • Cost-effective solution for POS lanes, will-call areas and omnichannel pickup
Features	• Tracks inventory in areas with limited space • Can be installed in multiple places without risking interference • Ideal for short-range applications to create targeted zones
Applications	• Point of sale • BOPIS or staging areas • Fitting rooms
Mounting	• Accessory pole available

Physical	**Dimensions Without Mounting Screws**	184 mm x 184 mm diameter	
		7.2 in. x 7.2 in. diameter	
	Connector	N-Type Female	
	Connector Location	Top	
	Mounting Options	Accessory pole available	
	Weight	1.0 kg/2.2 lbs.	
	Casing/Materials	Aluminum with white plastic cover	
Operational	**Frequency Range**	EU: 865–868 MHz	US: 900–928 MHz
	Gain	4.9 dBiL	
	VSWR (Return Loss)	1.5:1	
	Polarization	Left-hand circular	
	3 dB Beam Width	63°/60°	
	Maximum Power	13 Watts (37–55 VDC POE)	
Environmental	**Operating Temperature**	0° to +50°C	32° to +122°F
	Storage Temperature	-40° to +70°C	-40° to +158°F
	Humidity	95% RH non-condensing	

Zebra SR5502 Backroom and Warehouse RFID Antenna

SR5502

Description	• Dual antenna tracks and records from arrival to departure • Handles high tag volumes with increased accuracy and read rates
Features	• Simple installation with mounting bracket and Backroom SmartLens Sensor • Power-over-Ethernet (PoE) eliminates need to install power outlets • Ideal for typical complex backroom environments
Applications	• Stock room aisles • Receiving and staging areas • Open work areas
Mounting	• Comes complete with mounting bracket

Physical	**Dimensions Without Mounting Screws**	432 mm x 254 mm x 178 mm 17.0 in. L x 10.0 in. W x 7.00 in. D	
	Connector	N-Type Female x2	
	Connector Location	Rear	
	Mounting Options	Integrated mounting bracket	
	Weight	2.5 kg/5.5 lbs	
	Casing/Materials	Aluminum with white plastic cover	
Operational	**Frequency Range**	EU: 865-868, US:902-928 MHz	
	Gain	EU: 2 dBiL	US: 6.7 dBiL
	VSWR (Return Loss)	N/A	
	Polarization	Left-hand circular	
	3 dB Beam Width	83°x84°/71°x67°	
	Maximum Power	18 Watts (37–55 VDC POE)	
Environmental	**Operating Temperature**	-20° to +55°C	-4° to +131°F
	Storage Temperature	-40° to +70°C	-40° to +158°F
	Humidity	95% RH non-condensing	

Use Case Specific Antenna Specifications

	AN720 Rugged Indoor/Outdoor RFID Antenna		SP5504 Point of Sale (POS) RFID Antenna		SR5502 Backroom and Warehouse RFID Antenna	
Dimensions Without Mounting Screws:	132.8 mm L x 132.8 mm W x 18.1 mm D		184 mm x 184 mm diameter		432 mm x 260 mm x 178 mm	
	5.2 in. L x 5.2 in. W x 0.7 in. D		7.2 in. x 7.2 in. diameter		17.0 in. x 10.0 in. x 7.00 in.	
Connector	N-Type Female		N-Type Female		N-Type Female x2	
Connector Position	Rear		Top		Rear	
Mounting Options	Articulating mounting bracket included		Accessory pole available		Integrated mounting bracket	
Weight	0.37 kg/0.8 lbs.		1.0 kg/2.2 lbs.		2.5 kg/5.5 lbs.	
Casing/Materials	Aluminum with white plastic cover		Aluminum with white plastic cover		Aluminum with white plastic cover	
Frequency Range	EU: 865–868 MHz	US: 902–928 MHz	EU: 865–868 MHz	US: 902–928 MHz	EU: 865–868 MHz	US:902-928 MHz
Gain	EU: 3.5 dBiL	US/Canada: 3.0 dBiL	4.9 dBiL		EU: 2 dBiL	US: 6.7 dBiL
VSWR (Return Loss)	1.5:1		1.5:1		N/A	
Front-to-Back Ratio	8 dB		N/A		N/A	
Polarization	Left-hand circular		Left-hand circular		Left-hand circular	
3 dB Beam Width	100° in both planes		63°/60°		83°x84°/71°x67°	
Maximum Power	10 Watts		13 Watts (37–55 VDC POE)		18 Watts (37–55 VDC POE)	
Axial Ratio	2 dB		N/A		N/A	
Operating Temperature	-25° to +70°C	-13° to +158°F	0° to +50°C	32° to +122°F	-20° to +55°C	-4° to +131°F
IP Sealing	IP67		N/A		N/A	
Storage Temperature	-40° to +70°C	-40° to +158°F	-40° to +70°C	-40° to +158°F	-40° to +70°C	-40° to +158°F
Vibration	MIL-STD-810		N/A		MIL-STD-810G	
Humidity	IEC-68-2-30		95% RH non-condensing		95% RH non-condensing	

Thank you!

For more information, visit zebra.com/us/en/products/rfid/rfid-reader-antennas.html

Specifications subject to change without notice.