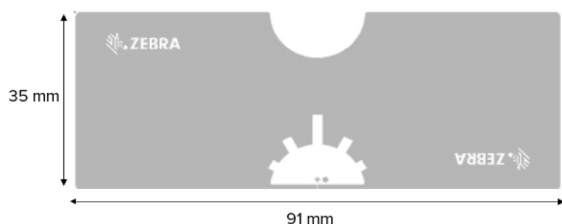


# Zebra ZBR4100 RFID Inlay

## Advanced Zebra-branded RFID Inlay

RFID inlays are critical to achieve the real-time visibility needed to streamline operations, minimize errors in asset-related data, as well as track, identify and maximize asset utilization. Designed by Zebra, one of the global leaders in RFID, the ZBR4100 inlay delivers excellent performance for your manufacturing, transportation and logistics applications that require high read ranges. Utilizing an extreme high-sensitivity UCODE 9 chip, the ZBR4100 provides read ranges of up to 20 meters in free space and is optimized to be read from nearly any angle. ZBR4100 inlays are designed and tested for optimal performance with Zebra printers and RFID readers, enabling you to maximize the benefits of RFID in your enterprise.



### Optimized to Be Read From Nearly Any Angle

The ZBR4100 is designed to provide strong performance from nearly any angle, which is important with a fixed reader infrastructure.

### High Sensitivity for Longer Read Ranges

Designed with the high-sensitivity UCODE 9 chipset (EPC-96-bit, User N/A), ZBR4100 inlays deliver read ranges of up to 20 meters in free space.

### Print Confident. Print Quality. Print Zebra

Zebra employs ISO 9001 quality processes to reduce instances of unsuccessful encoding. We pre-test labels with Zebra readers and printers to ensure industry-leading performance. And we offer you the latest generation of chips and consistent label materials from order-to-order to deliver reliable, high-quality RFID labels and tags.

### Custom RFID Labelling Solutions

With our state-of-the-art presses and RFID manufacturing equipment, we can create a customized RFID labelling solution to meet the unique requirements of your application. And we can quickly recommend the optimal label material and inlay to achieve maximum ROI.

### Unmatched Expertise in RFID

Zebra is your trusted expert in all things RFID. We offer end-to-end RFID solutions—including pre-tested RFID labels made with the right materials and adhesives, along with the highest-performing inlays and chips—customized for your application. We have played a central role in pioneering RFID technologies and defining global standards since the mid-1990s when smart-label technology first appeared. We hold more than 575 RFID patents and numerous industry-firsts in RFID.

# Specifications

## Technical Information

Chip	UCODE 9
EPC Memory	96 bit
User Memory	N/A
TID	96 bit factory locked (48 bit unique)
Read Sensitivity	-24 dBm
Write Sensitivity	-22 dBm
RFID Standards	EPC Gen2v2
Read Range	Up to 20 m

### Theoretical Read Range: ETSI (865-868 MHz)\*

Air	9 m
Cardboard	15 m
Fiberglass	19 m
Glass	17 m
PTFE	17 m
Polyacetyl	19 m
PVC	20 m
Rubber	16 m

### Theoretical Read Range: FCC (902-928 MHz)\*

Air	18 m
Cardboard	18 m
Fiberglass	19 m
Glass	16 m
PTFE	20 m
Polyacetyl	19 m
PVC	20 m
Rubber	15 m

## Product Performance and Suitability

Operating Temperature: -40°C/+85°C  
Storage Temperature: -55°C/+125°C

## Testing and Compliance

All inlays certified by Zebra have been pre-tested with Zebra printers and readers. Robust antenna design that reads well at any orientation on many materials.

## Material Testing in End Application

The information contained in this document is to be used for guidance only and is not intended for use in setting specifications. All purchasers of Zebra products shall be solely responsible for independently determining if the product conforms to all requirements of their unique application.

## Warranty

Supplies are warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For the complete warranty statement, please visit: [www.zebra.com/warranty](http://www.zebra.com/warranty)

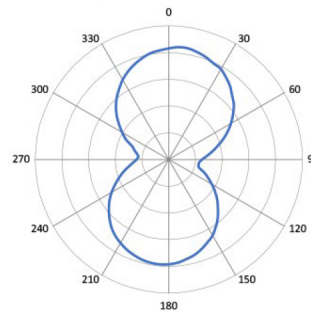
## Footnotes

\*Theoretical read range data is meant to be directional. Actual performance will depend on your application and environment. Testing is recommended.

## Radiation Pattern

\*\*Read range drops to 12% of maximum when inlay is perpendicular (90° and 270°) to the reading antenna. To learn more about Radiation Pattern visit [www.zebra.com/rfidlabels](http://www.zebra.com/rfidlabels)

### RADIATION PATTERN\*\*



## Markets and Applications

### Transportation and Logistics

- Case/Pallet labeling

### Warehousing

- Case/Pallet labeling
- Work-in-process

### Retail

- Case/Pallet labeling

### Healthcare

- Case/Pallet labeling

### Government

- Case/Pallet labeling

### Manufacturing

- Case/Pallet labeling



1 (888) 238-1155 Inside USA • 1 (205) 383-2244 Outside USA  
info@atlasRFIDstore.com • www.atlasRFIDstore.com

atlasRFIDstore.com