

# ZBR2100-E

## Paper-based RFID Inlay

Most RFID inlays are manufactured using aluminum which is chemically etched on a PET carrier and is not recyclable with the paper label it is applied to. By switching to paper-based RFID inlays, manufactured using antennas made by laser cutting technology, they are not only sustainable and 100% plastic-free, but they also offer less waste and up to 90% smaller carbon footprint compared to using PET materials. The ZBR2100-E is a paper-based RFID inlay that can help your business reach its sustainability goals. Designed with the latest high-sensitivity UCODE 9 chipset, the ZBR2100-E delivers a high read range of up to 19 meters.



### Environmentally Friendly and 100% Plastic-Free

The ZBR2100-E is a 100% plastic-free, paper-based inlay with laser cut antenna, saving resources during manufacturing such as water, energy and greenhouse gases. When combined with fiber-based materials such as paper packaging, it may not\* need to be removed for the packaging to be recycled, reducing the amount of waste going into landfill.

### High Sensitivity

Designed with the latest high sensitivity UCODE 9 chipset, the ZBR2100-E can deliver high read ranges of up to 19 meters.

### Destructible Inlay

The paper inlay is thinner than typical PET inlays. When combined with an appropriate face material and label, such as the Z-Select 2000T, the ZBR2100-E can contribute to providing a tamper-evident labeling solution.

### Print Confident. Print Quality. Print Zebra.

Printing supplies can impact everything from printhead lifespan to operational efficiency. That's why we design, produce and rigorously test our own line of thermal printing supplies to ensure consistent, optimized performance. We utilize an ISO 9001 certified, 23-point quality inspection to ensure consistent quality. No matter when you order your labels you can count on the same great performance.

Reduce plastic usage with the paper-based ZBR2100-E RFID Inlay.  
For more information please visit, [www.zebra.com/rfidlabels](http://www.zebra.com/rfidlabels)

# Specifications

## Technical Information

Chip	NXP 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 19 m in free space

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

Air	11 m
Cardboard	18 m
Fiberglass	10 m
Glass	8 m
PTFE	19 m
Polyacetyl	12 m
PVC	13 m
Rubber	8 m

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

Air	19 m
Cardboard	15 m
Fiberglass	11 m
Glass	12 m
PTFE	13 m
Polyacetyl	11 m
PVC	14 m
Rubber	12 m

## Testing and Compliance

All inlays certified by Zebra have been pre-tested with Zebra printers and readers.

## 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. All products should be pre-tested to ensure they meet all intended requirements of specific end-use applications.

## 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: [zebra.com/warranty](http://zebra.com/warranty).

## Product Performance and Suitability

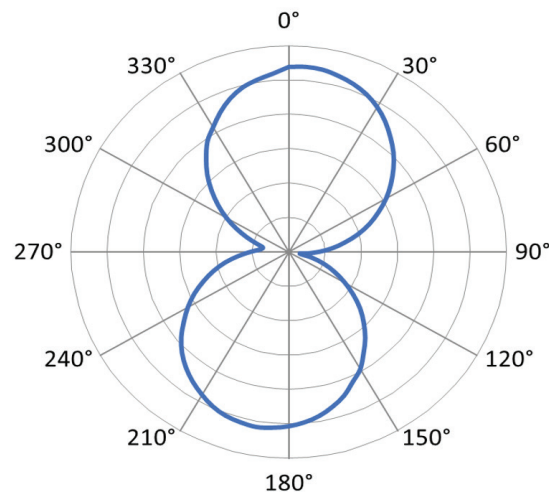
Operating Temperature: -40°C/+85°C  
Storage Temperature: -55°C/+125°C

## Footnotes

\* Check local recycling capabilities.  
\*\* 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 25% 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)



## Markets and Applications

### Logistics

- Case/pallet labeling

### Manufacturing

- Work in process labeling

### Other

- Security labeling



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