

# Zebra ZBR2100 RFID Inlay

## General Purpose Zebra-branded RFID Inlay

RFID inlays are critical to achieve the real-time visibility needed to streamline operations and 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 ZBR2100 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 ZBR2100 provides read ranges of up to 20 meters in free space. ZBR2100 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.



### **High Sensitivity for Longer Read Ranges**

Designed with the high-sensitivity UCODE 9 chipset (EPC-96-bit, User N/A), ZBR2100 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 in open air	

	Theoretical Read Ra	heoretical Read Range: ETSI (865-868 MHz)*	
	Air	12 m	
	Cardboard	17 m	
	Fiberglass	10 m	
	Glass	9 m	
	PTFE	18 m	
	Polyacetyl	11 m	
	PVC	12 m	

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Rubbei	0111
Theoretical Read Ra	nge: FCC (902-928 MHz)*
Air	20 m
Cardboard	15 m
Fiberglass	11 m
Glass	14 m
PTFE	13 m
Polyacetyl	11 m
PVC	14 m
Rubber	14 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.

#### **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

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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

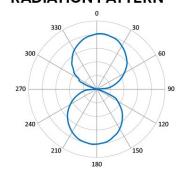
#### **Footnotes**

\*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

## **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