# AD-251r6-P ETSI

### Overview

Frequency Band UHF 860 - 960 MHz

**Chip** Impinj Monza R6-P

**Antenna Dimensions** 95 x 14.5 mm / 3.74 x 0.57 in

International Standard ISO/IEC 18000-63 Type C

Industry Segments Food

Applications Microwave Safe Asset Tracking Supply Chain Management

RoHs EU Directive 2011/65/EU and 2015/863 Compliant



# Microwave-safe UHF tags

As part of Avery Dennison's exclusive WaveSafe™ product line, AD-251r6-P inlays have been developed for providing a true end-to-end solution for the food industry.

By avoiding arcing or excessive heating when used as recommended if subjected to a microwave environment, AD-251r6-P inlays provide a perfect solution for food safety, compliance, and high-performance item-level tracking applications.

AD-251r6-P inlays are available in two, unique WaveSafe<sup>™</sup> designs; AD-251r6-P ETSI and AD251r6-P FCC. Compliant with TÜV Rheinland<sup>®</sup> T-Mark certification standards, both inlays have the capability to withstand up to 5 minutes of microwave cook time if used in accordance with established parameters.

Both designs come with Monza r6-P chips from Impinj featuring 128/96-bit of EPC memory, 32/64-bit of User Memory and a 48-bit unique serialized TID Number. Delivery format is Pressure Sensitive Label.

Like all RFID products from Avery Dennison Intelligent Labels, AD-251r6-P inlays are manufactured according to the industry's highest quality standards, as confirmed by the RFID Lab at Auburn University: The inspection body awarded Avery Dennison its first comprehensive and significant ARC accreditation for quality.



Smartrac an Avery Dennison company

rfid.averydennison.com

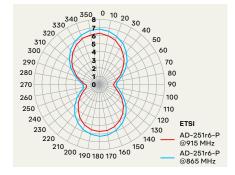
### **Technical features**

Chip	Impinj Monza R6-P
EPC and User Memory	128-bit / 96-bit and 32-bit / 64-bit
TID Memory	96-bit / 48-bit unique serial number
Product Code	RF100497
Delivery Format	Label / sticker
Die-cut Dimension	98 x 18 mm / 3.90 x 0.70 in
Inlay Substrate	PET
Face Sheet	White PET
Total Thickness	14 - 16 mils / 349 - 400 microns
Standard Pitch	31.75 mm / 1.25 in
Web Width	105 mm / 4.125 in
Core Size	76 mm / 3 in
Quantity / Reel	5487 pcs/reel
Operating	-40 °C to 85 °C
Temperature	-40 °F to 185 °F
On-Metal	Non metal

## Recommended microwave safe use parameters

Microwave Wattage	Maximum Cook Time
950W	5 minutes
1200W	4 minutes
1800W	2 minutes

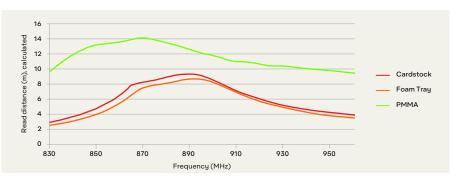
# Orientation sensitivity



All graphs are indicative: performance in real life applications may vary.

- · Label placement on the side of packaging.
- A minimum of 8 ounces of product with temperature ranging from frozen to chilled.
- Products to include meat, fish, and prepared meals.
- Packaging material to include plastic (e.g. PET) with plastic wrap, plastic with plastic lid, or cardboard.
- Power setting up to and including 100% power for up to and including 5 minutes on the wattage set forth in the following table.

### Read range



#### **Contact information** rfid.averydennison.com/contact North America: +1-866-903-7343 (toll free US) International: +1-678-617-2359

RoHS

© 2020 Avery Dennison Corp. All rights reserved. 170 Monarch Lane, Miamisburg, OH 45342, USA Third party trademarks and/or trade names used herein are the property of their respective owner(s). Some of the trademarks appear for identification purposes only.

Warranty: Please refer to Avery Dennison Intelligent Labels standard terms and conditions: rfid.averydennison.com/termsandconditions Care and handling: RFID inlays are sensitive to ESD. Observe standard industry practices relating to electronics / RFID to keep environmental impact and static charge to a minimum.

Applications: This product should be tested by the customer / user thoroughly under end use conditions to ensure the product meets the particular requirements. Avery Dennison does not represent that this product is fit for any particular purpose or use. Avery Dennison reserves the right to modify. change, supplement or discontinue product offerings at any time without notice. The information contained herein is believed to be reliable but Avery Dennison makes no representation concerning the accuracy or correctness of the data.



# AD-251r6-P FCC

### Overview

Frequency Band UHF 860 - 960 MHz

**Chip** Impinj Monza R6-P

**Antenna Dimensions** 95 x 13 mm / 3.74 x 0.52 in

International Standard ISO/IEC 18000-63 Type C

Industry Segments Food

Applications Microwave Safe Asset Tracking Supply Chain Management

RoHs EU Directive 2011/65/EU and 2015/863 Compliant



# Microwave-safe UHF tags

AD-251r6-P inlays from Avery Dennison have been developed for item-level tagging of frozen packaged foods while delivering high read tracking capabilities.

AD-251r6-P inlays are available in two, unique WaveSafe<sup>™</sup> designs; AD-251r6-P ETSI and AD251r6-P FCC. Compliant with TÜV Rheinland® T-Mark certification standards, both inlays have the capability to withstand up to 5 minutes of microwave cook time if used in accordance with established parameters.

Both designs come with Monza r6-P chips from Impinj featuring 128/96-bit of EPC memory, 32/64-bit of User Memory and 96-bit of TID with a 48-bit unique serial number. Delivery format is label / sticker.

Like all RFID products from Avery Dennison Intelligent Labels, AD-251r6-P inlays are manufactured according to the industry's highest quality standards, as confirmed by the RFID Lab at Auburn University: The inspection body awarded Avery Dennison its first comprehensive and significant ARC accreditation for quality.





rfid.averydennison.com

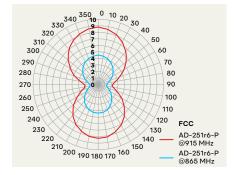
### **Technical features**

Chip	Impinj Monza R6-P
EPC and User Memory	128-bit / 96-bit and 32-bit / 64-bit
TID Memory	96-bit / 48-bit unique serial number
Product Code	RF100500
Delivery Format	Label / sticker
Die-cut Dimension	98 x 18 mm / 3.90 x 0.70 in
Inlay Substrate	PET
Face Sheet	White PET
Total Thickness	14 - 16 mils / 349 - 400 microns
Standard Pitch	31.75 mm / 1.25 in
Web Width	105 mm / 4.125 in
Core Size	76 mm / 3 in
Quantity / Reel	5487 pcs/reel
Operating	-40 °C to 85 °C
Temperature	-40 °F to 185 °F
On-Metal	Non metal

### Recommended microwave safe use parameters

Microwave Wattage	Maximum Cook Time
950W	5 minutes
1200W	4 minutes
1800W	2 minutes

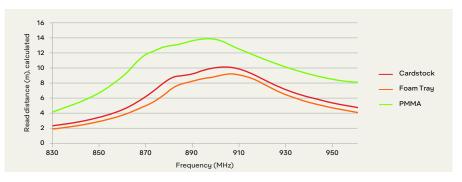
# Orientation sensitivity



All graphs are indicative: performance in real life applications may vary.

- · Label placement on the side of packaging.
- A minimum of 8 ounces of product with temperature ranging from frozen to chilled.
- Products to include meat, fish, and prepared meals.
- Packaging material to include plastic (e.g. PET) with plastic wrap, plastic with plastic lid, or cardboard.
- Power setting up to and including 100% power for up to and including 5 minutes on the wattage set forth in the following table.

# Read range



#### **Contact information** rfid.averydennison.com/contact North America: +1-866-903-7343 (toll free US) International: +1-678-617-2359

RoHS

© 2020 Avery Dennison Corp. All rights reserved. 170 Monarch Lane, Miamisburg, OH 45342, USA Third party trademarks and/or trade names used herein are the property of their respective owner(s). Some of the trademarks appear for identification purposes only.

Warranty: Please refer to Avery Dennison Intelligent Labels standard terms and conditions: rfid.averydennison.com/termsandconditions Care and handling: RFID inlays are sensitive to ESD. Observe standard industry practices relating to electronics / RFID to keep environmental impact and static charge to a minimum.

Applications: This product should be tested by the customer / user thoroughly under end use conditions to ensure the product meets the particular requirements. Avery Dennison does not represent that this product is fit for any particular purpose or use. Avery Dennison reserves the right to modify. change, supplement or discontinue product offerings at any time without notice. The information contained herein is believed to be reliable but Avery Dennison makes no representation concerning the accuracy or correctness of the data.

