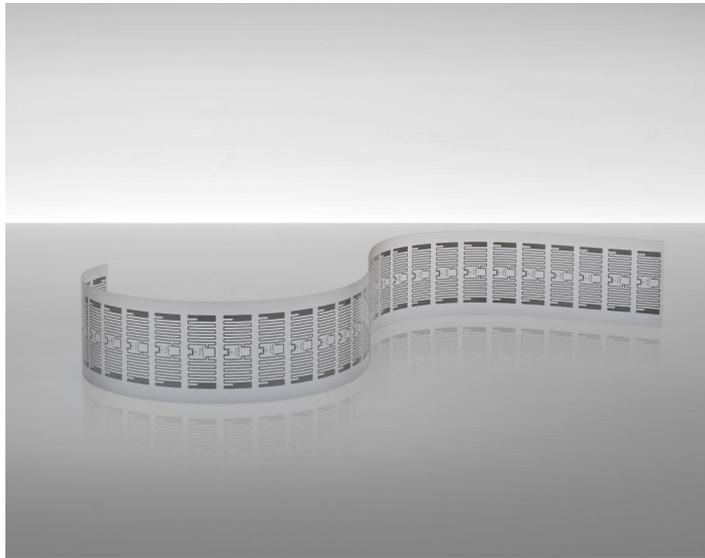# AD Miniweb M830 ETSI

## Compact, high performance RFID inlay for item-level tagging



AD Miniweb M830 ETSI inlays are designed for general retail and apparel applications. Offering a compact size and excellent performance, this inlay is designed for a broad range of applications, including inventory and logistics, electronics, sporting goods, home essentials, and general merchandise. Providing excellent performance in the ETSI frequency band, this inlay carries an antenna size of 42 x 16 mm and a PET antenna carrier.

AD Miniweb ETSI M830 was developed as the next generation replacement of AD Miniweb M730. The design offers improved global performance over its predecessor, achieving certification of challenging University of Auburn (ARC) specs, "I" and "Q". The popular Apparel design is an excellent choice for retailers who will be tagging merchandise in the ETSI region and require consistently high read rates with a small label footprint. AD Miniweb ETSI M830 is also a great fit for tagging products in the Home Goods category, and particularly on materials such as glass and plastic.
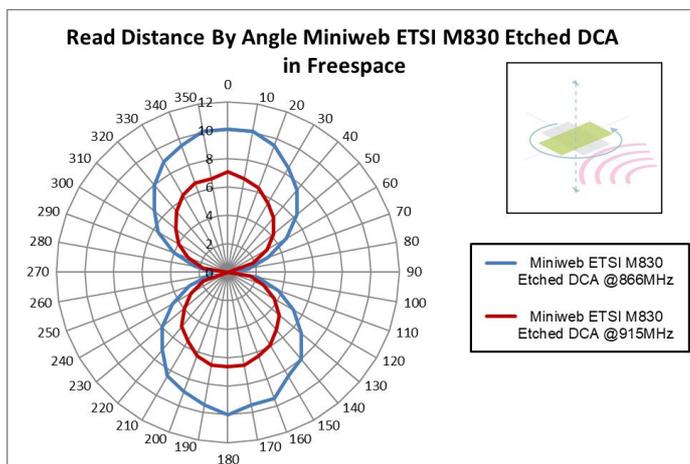
Like all RFID products from Avery Dennison, AD Miniweb M830 ETSI inlays are manufactured according to the industry's highest quality standards, as confirmed by the RFID Lab at Auburn University: The inspection body awarded Avery Dennison its first comprehensive and significant ARC accreditation for quality.

## Overview

| | |
|---|---|
| Frequency Band | UHF 860 - 960 MHz |
| Chip / Chip Attachment Technology | Impinj M830 |
| Antenna Dimensions | 42 x 16 mm / 1.70 x 0.60 in |
| International Standard | ISO 18000-63, EPC Class 1 Gen 2 (Gen2X enhanced) |
| Industry Segments | Retail<br>Apparel |
| Applications | Inventory and logistics<br>Electronics<br>Sporting goods,<br>Home essentials<br>General merchandise |
| RoHS | EU Directive 2011/65/EU and Directive (EU) 2015/863 |
| REACH | Regulation (EC) No. 1907/2006 |

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## Technical features
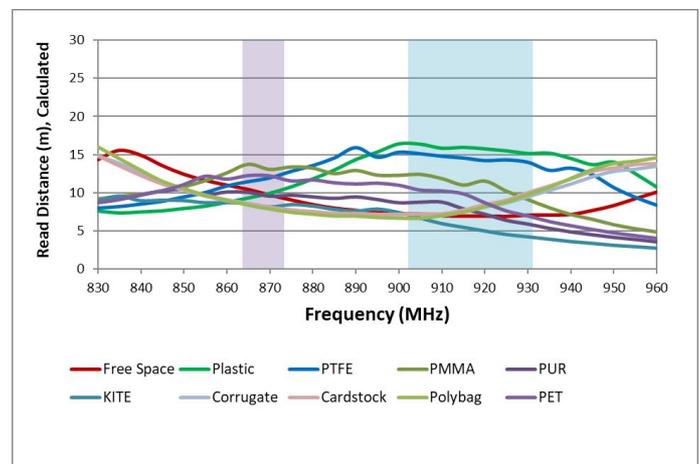
| | | | |
|---|---|---|---|
| Chip / Chip Attachment Technology | Impinj M830 / Direct chip attach (DCA) | | |
| EPC and User Memory | 128-bit EPC | | |
| TID Memory | 96-bit / 48-bit unique serial number | | |
| Product Code | IL-612516 | IL-612532 | IL-612534 |
| Delivery Format | Dry inlay | Wet inlay | Label / sticker |
| Die-Cut Dimensions | N/A | 45 x 18 mm / 1.77 x 0.71 in | 5 x 18 mm / 1.77 x 0.71 in |
| Die-Cut Corner Radius | - | - | - |
| Inlay Substrate | PET Clear | PET Clear | PET Clear |
| Face Sheet | - | - | Paper Mid Gloss |
| Adhesive | - | RA-5 | RA-5 |
| Total Thickness (over chip and release liner) | 7.20 mils / 183 microns | 7.99 mils / 203 microns | 11.49 mils / 292 microns |
| Standard Pitch | 20 mm / 0.78 in | 20 mm / 0.78 in | 20 mm / 0.78 in |
| Web Width | 48 mm / 1.89 in | 48 mm / 1.89 in | 48 mm / 1.89 in |
| Core Size | 76 mm / 3 in | 76 mm / 3 in | 76 mm / 3 in |
| Quantity / Reel | 10,000 pcs/reel | 20,000 pcs/reel | 5,000 pcs/reel |
| Size of Roll | Max OD 15.5" | Max OD 13" | Max OD 8 " |
| Operating Temperature | -40 °C to 85 °C / -40 °F to 185 °F | | |
| On-Metal | Non metal | | |
| ARC Certificates | ARC Specification Guide | | |

*Other product codes available upon request.

## Orientation sensitivity



Read Distance By Angle Miniweb ETSI M830 Etched DCA in Freespace

— Miniweb ETSI M830 Etched DCA @866MHz
— Miniweb ETSI M830 Etched DCA @915MHz

## Read range



Free Space · Plastic · PTFE · PMMA · PUR · KITE · Corrugate · Cardstock · Polybag · PET

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

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**Find more label solutions at**
rfid.averydennison.com

REACH
COMPLIANCE

RoHS

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