# AD-456u8 ETSI

## Overview

**Frequency Band**
UHF 860 - 960 MHz

**Chip**
NXP UCODE 8

**Antenna Dimensions**
64 x 6 mm / 2.52 x 0.24 in

**International Standard**
ISO/IEC 18000-63 Type C

**Industry Segments**
Beauty and Personal Care
Food

**Applications**
On-Metal Asset Tracking
Brand Protection
Food Item-Level Retail

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

## Robust and versatile labels for hard to read surfaces

Available in both FCC and ETSI versions, AD-456u8 inlays from Avery Dennison are an excellent option for tagging items that cannot be RFID-enabled with traditional inlay designs.

Equipped with a UCODE 8 chip from NXP, the Gen2 UHF RFID labels are perfectly suited for applications related to manufacturing, computers and electronics, and miscellaneous consumer goods, including beverages such as bottled water, juices, and soft drinks in aluminum cans. AD-456u8 inlays are robust, high performing and incredibly versatile solutions for tagging hard to read surfaces.

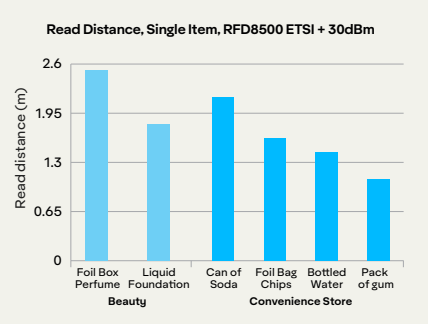
The product's UCODE 8 chip features 128-bit of EPC memory and 96-bit unique factory-locked TID number. A 48-bit unique serial number is factory-encoded into the TID. The sole delivery format is label / sticker.

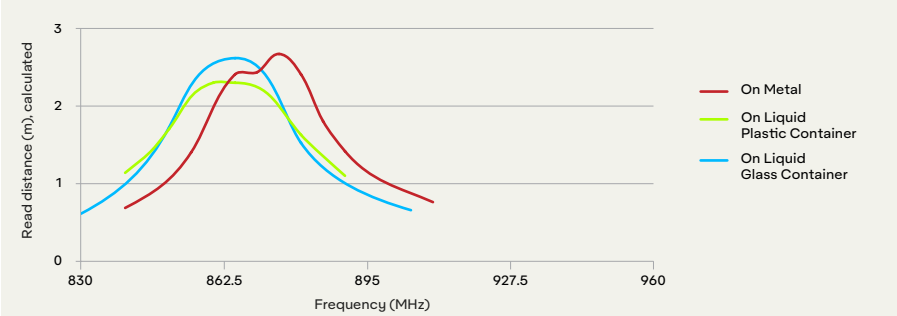
Like all RFID products from Avery Dennison, AD-456u8 inlays are manufactured according to the industry's highest quality standards, as confirmed by the RFID Lab at Auburn University: The inspection body awarded Avery Dennison its first comprehensive and significant ARC accreditation for quality.

# Technical features

| | |
|---|---|
| **Chip** | NXP UCODE 8 |
| **EPC and User Memory** | 128-bit and n/a |
| **TID Memory** | 96-bit / 48-bit unique serial number |
| **Product Code** | RF100574 |
| **Delivery Format** | Label / sticker |
| **Die-cut Dimension** | 64 x 6 mm / 2.52 x 0.24 in |
| **Inlay Substrate** | PET |
| **Face Sheet** | 2 mil White PET |
| **Total Thickness** | 37 - 39 mils / 932 - 983 microns |
| **Standard Pitch** | 25.4 mm / 1 in |
| **Web Width** | 68.6 mm / 2.7 in |
| **Core Size** | 76 mm / 3 in |
| **Quantity / Reel** | 1300 pcs / reel |
| **Operating Temperature** | -40 °C to 85 °C<br>-40 °F to 185 °F |
| **On-Metal** | Metal |

# Read range




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

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RoHS



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# AD-456u8 ETSI Large Die Cut

## Overview

**Frequency Band**
UHF 860 - 960 MHz

**Chip**
NXP UCODE 8

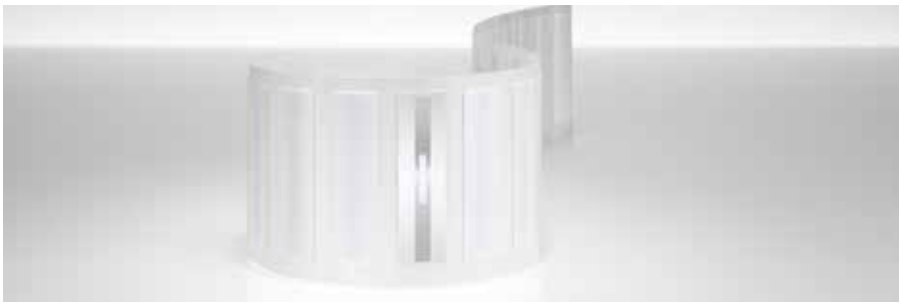
**Antenna Dimensions**
64 x 18 mm / 2.52 x 0.71 in

**International Standard**
ISO/IEC 18000-63 Type C

**Industry Segments**
Beauty and Personal Care
Food

**Applications**
On-Metal Asset Tracking
Brand Protection
Food Item-Level Retail

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



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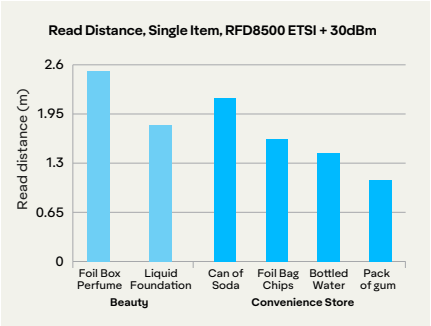
The product's UCODE 8 chip features 128-bit of EPC memory and 96-bit unique factory-locked TID number. A 48-bit unique serial number is factory-encoded into the TID. The sole delivery format is label / sticker.

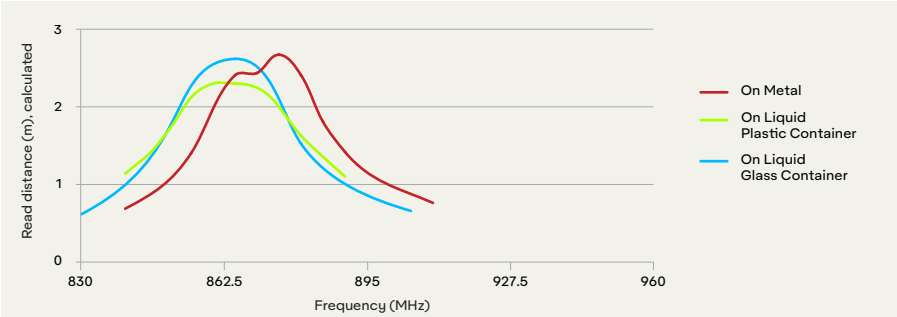
Like all RFID products from Avery Dennison, AD-456u8 inlays are manufactured according to the industry's highest quality standards, as confirmed by the RFID Lab at Auburn University: The inspection body awarded Avery Dennison its first comprehensive and significant ARC accreditation for quality.

# Technical features

| | |
|---|---|
| **Chip** | NXP UCODE 8 |
| **EPC and User Memory** | 128-bit and n/a |
| **TID Memory** | 96-bit / 48-bit unique serial number |
| **Product Code** | RF100577 |
| **Delivery Format** | Label / sticker |
| **Die-cut Dimension** | 64 x 18 mm / 2.52 x 0.71 in |
| **Inlay Substrate** | PET |
| **Face Sheet** | 2 mil White PET |
| **Total Thickness** | 37 - 39 mils / 932 - 983 microns |
| **Standard Pitch** | 25.4 mm / 1.0 in |
| **Web Width** | 68.6 mm / 2.7 in |
| **Core Size** | 76 mm / 3 in |
| **Quantity / Reel** | 1600 pcs / reel |
| **Operating Temperature** | -40 °C to 85 °C<br>-40 °F to 185 °F |
| **On-Metal** | Metal |

# Read range

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RoHS



AVERY DENNISON

# AD-456u8 ETSI Tamper-Evident

## Overview

**Frequency Band**
UHF 860 - 960 MHz

**Chip**
NXP UCODE 8

**Antenna Dimensions**
64 x 6 mm / 2.52 x 0.24 in

**International Standard**
ISO/IEC 18000-63 Type C

**Industry Segments**
Beauty and Personal Care
Food

**Applications**
On-Metal Asset Tracking
Brand Protection
Food Item-Level Retail

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

## Robust and versatile labels for hard to read surfaces

Available in both FCC and ETSI versions, AD-456u8 inlays from Avery Dennison are an excellent option for tagging items that cannot be RFID-enabled with traditional inlay designs.

Equipped with a UCODE 8 chip from NXP, the Gen2 UHF RFID labels are hence perfectly suited for applications related to manufacturing, computers and electronics, and miscellaneous consumer goods, including beverages such as bottled water, juices, and soft drinks in aluminum cans. AD-456u8 inlays are robust, high performing and incredibly versatile solutions for tagging hard to read surfaces.

The product's UCODE 8 chip features 128-bit of EPC memory and 96-bit unique factory-locked TID number. A 48-bit unique serial number is factory-encoded into the TID. The sole delivery format is Pressure Sensitive Label.

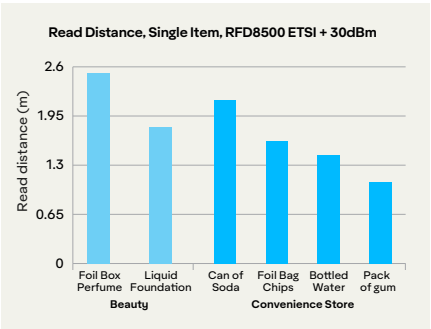
Like all RFID products from Avery Dennison, AD-456u8 inlays are manufactured according to the industry's highest quality standards, as confirmed by the RFID Lab at Auburn University: The inspection body awarded Avery Dennison its first comprehensive and significant ARC accreditation for quality.

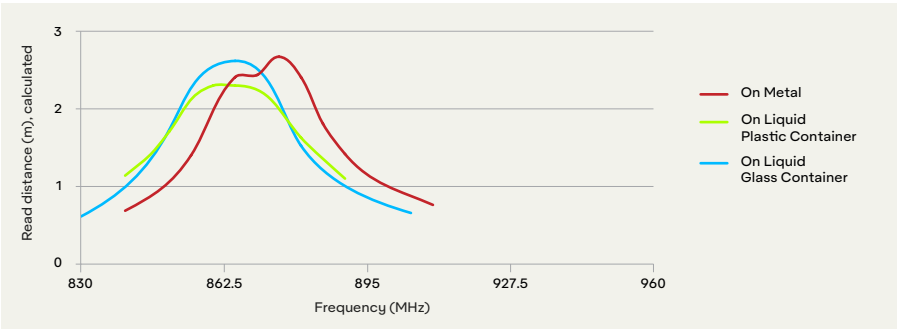
A tamper-evident security label construction designed to provide visible evidence of tampering when label removal is attempted. A thin layer of paper (47# Tamper Resistant Litho) left behind on the surface of the tagged product will indicate the label had been removed. In addition, the removed tag will be absent of adhesive, preventing it from being re-applied or attached to another product. This product helps to protect against incidents of fraud and theft.

# Technical features

| | |
|---|---|
| **Chip** | NXP UCODE 8 |
| **EPC and User Memory** | 128-bit and n/a |
| **TID Memory** | 96-bit / 48-bit unique serial number |
| **Product Code** | RF100593 |
| **Delivery Format** | Label / sticker |
| **Die-cut Dimension** | 64 x 6 mm / 2.52 x 0.24 in |
| **Inlay Substrate** | PET |
| **Face Sheet** | 2 mil White PET |
| **Inlay Liner Material** | 40# SCK |
| **Security Material** | 47# Tamper Resistant Litho |
| **Total Thickness** | 39.3 - 41.3 mils / 998 - 1049 microns |
| **Standard Pitch** | 25.4 mm / 1 in |
| **Web Width** | 68.6 mm / 2.7 in |
| **Core Size** | 76 mm / 3 in |
| **Quantity / Reel** | 1,549 pcs / reel |
| **Operating Temperature** | -40 °C to 85 °C<br>-40 °F to 185 °F |
| **On-Metal** | Metal |

# Read range

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**Warranty:** Please refer to Avery Dennison 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.

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# AD-456u8 FCC

## Overview

**Frequency Band**
UHF 860 - 960 MHz

**Chip**
NXP UCODE 8

**Antenna Dimensions**
64 x 6 mm / 2.52 x 0.24 in

**International Standard**
ISO/IEC 18000-63 Type C

**Industry Segments**
Beauty and Personal Care
Food

**Applications**
On-Metal Asset Tracking
Brand Protection
Food Item-Level Retail

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

## Robust and versatile labels for hard to read surfaces

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The product's UCODE 8 chip features 128-bit of EPC memory and 96-bit unique factory-locked TID number. A 48-bit unique serial number is factory-encoded into the TID. The sole delivery format is label / sticker.

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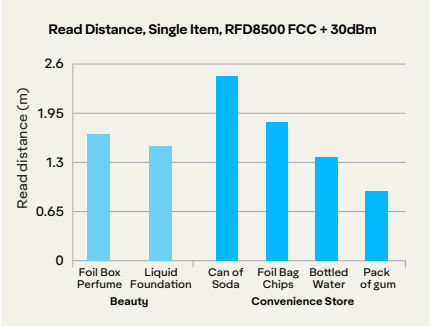
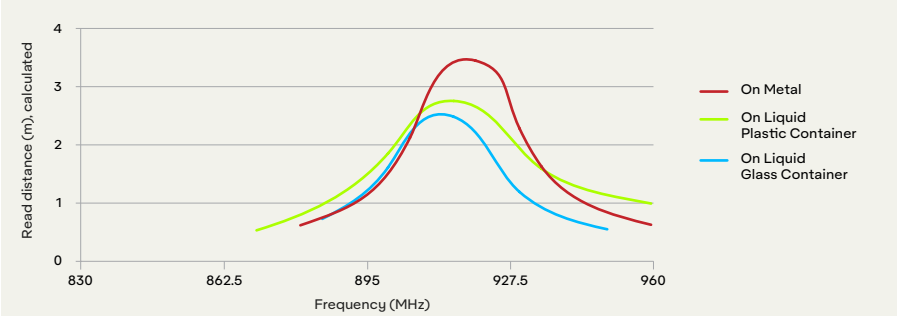
# Technical features

| | |
|---|---|
| **Chip** | NXP UCODE 8 |
| **EPC and User Memory** | 128-bit and n/a |
| **TID Memory** | 96-bit / 48-bit unique serial number |
| **Product Code** | RF100575 |
| **Delivery Format** | Label / sticker |
| **Die-cut Dimension** | 64 x 6 mm / 2.52 x 0.24 in |
| **Inlay Substrate** | PET |
| **Face Sheet** | 2 mil White PET |
| **Total Thickness** | 32 - 34 mils / 810 - 861 microns |
| **Standard Pitch** | 25.4 mm / 1 in |
| **Web Width** | 68.6 mm / 3 in |
| **Core Size** | 76 mm / 3 in |
| **Quantity / Reel** | 1300 pcs / reel |
| **Operating Temperature** | -40 °C to 85 °C<br>-40 °F to 185 °F |
| **On-Metal** | Metal |

# Read range

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# AD-456u8 FCC Large Die Cut

## Overview

**Frequency Band**
UHF 860 - 960 MHz

**Chip**
NXP UCODE 8

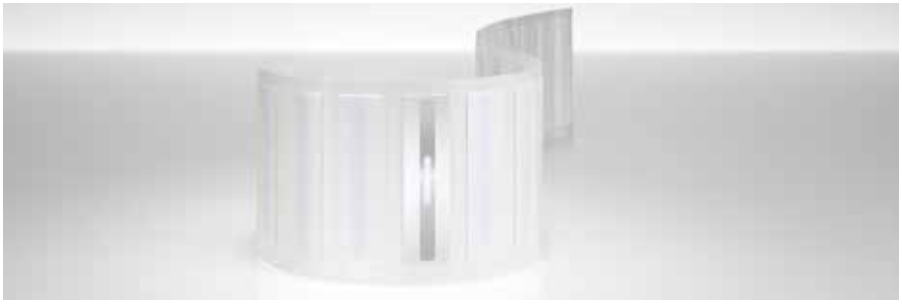
**Antenna Dimensions**
64 x 18 mm / 2.52 x 0.71 in

**International Standard**
ISO/IEC 18000-63 Type C

**Industry Segments**
Beauty and Personal Care
Food

**Applications**
On-Metal Asset Tracking
Brand Protection
Food Item-Level Retail

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



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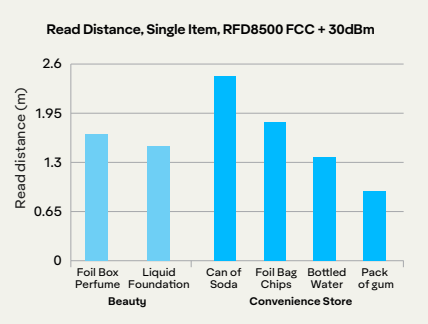
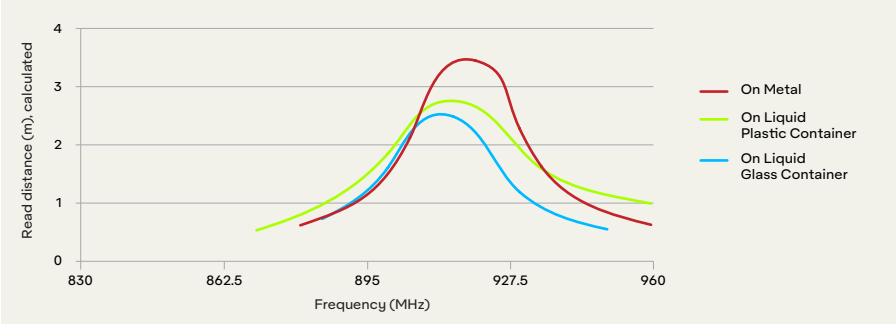
# Technical features

| | |
|---|---|
| **Chip** | NXP UCODE 8 |
| **EPC and User Memory** | 128-bit and n/a |
| **TID Memory** | 96-bit / 48-bit unique serial number |
| **Product Code** | RF100599 |
| **Delivery Format** | Label / sticker |
| **Die-cut Dimension** | 64 x 18 mm / 2.52 x 0.71 in |
| **Inlay Substrate** | PET |
| **Face Sheet** | 2 mil White PET |
| **Total Thickness** | 37 - 39 mils / 932 - 983 microns |
| **Standard Pitch** | 25.4 mm / 1 in |
| **Web Width** | 68.6 mm / 2.7 in |
| **Core Size** | 76 mm / 3 in |
| **Quantity / Reel** | 1300 pcs / reel |
| **Operating Temperature** | -40 °C to 85 °C<br>-40 °F to 185 °F |
| **On-Metal** | Metal |

# Read range

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