## 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.



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	-40 °C to 85 °C
Temperature	-40 °F to 185 °F
On-Metal	Metal

### Read range



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

**Contact information** rfid.averydennison.com/contact

North America: +1-866-903-7343 (toll free US) International: +1-678-617-2359



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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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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.



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	-40 °C to 85 °C
Temperature	-40 °F to 185 °F
On-Metal	Metal

### Read range



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## 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.



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	-40 °C to 85 °C
Temperature	-40 °F to 185 °F
On-Metal	Metal

### Read range



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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.



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	-40 °C to 85 °C
Temperature	-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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The product's UCODE 8 chip features 128-bit of EPC memory and a 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.



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	-40 °C to 85 °C
Temperature	-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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