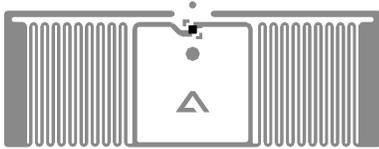




# ALN-10015 "Glint" Jewelry/Cosmetics Inlay

The Alien Technology® ALN-10015 "Glint" RFID inlay is designed for use in jewelry and cosmetic applications where the tag may be in close proximity to small metal or metallic coated objects



### Applications

- Jewelry tagging
- Use with small metallic objects
- Cosmetics

FEATURE	DESCRIPTION	BENEFIT
Small form factor, non-near field read tag	Despite its diminutive size (27 x 9.7mm), this tag uses conventional long range UHF antenna unlike many other competitive tag solutions.	Offers read/write distances in the order of feet/meters unlike other competitive tags that are near-field and only read an inch or two.
Tuned for metal and cosmetics	Designed to be in close proximity to metal or metallic surfaces.	Uses the metal surfaces to "amplify" the read/write distance of the tag.
Next generation Higgs™ 10 features and performance	A mass-market optimized tag with class leading read and write performance.	Rapid programming of serialized tags and excellent read/write performance

### Features:

- › Worldwide operation in all RFID UHF bands (860-960 MHz)
- › Global GS1 Class 1 Gen 2 (V1.2.0) and ISO/IEC 18000-6C compliance
- › Class leading read and write performance
- › 480 bits of NVRAM Memory
  - Up to 128 EPC bits (96-bits nominal)
  - Up to 32 User bits (with 96 bit EPC)
  - 48 bit Unique TID
  - 32 bit Access and 32 bit Kill passwords
- › User Memory may be Block Perma-Locked as well as read password protected
- › Low power operation for both read and write
- › *BlastWrite™* and *QuickWrite™* mass-encoding
- › Available in high-yield, high capacity dry/wet inlay rolls



### Product Overview:

Powered by Alien®'s break-through Higgs™10 UHF RFID IC and innovative "Glint" antenna design, the ALN-10015 delivers industry leading EPC Gen 2 performance and reliability for retail jewelry and cosmetics especially when tagging in compact and highly dense areas.

With its Higgs-10 core, the Glint delivers next generation read and write performance, yet is completely optimized for the highest volume enterprise and retail applications.

Enhanced memory footprint includes a 48-bit Unique TID for authentication and serialization applications and password protected read and write support to prevent unauthorized viewing and modification of the tag's data.

.ALN-10015 inlays are World Tag compliant, enabling consistent operation across the diverse frequencies of the Americas, Europe, Middle East, Asia, and Africa.

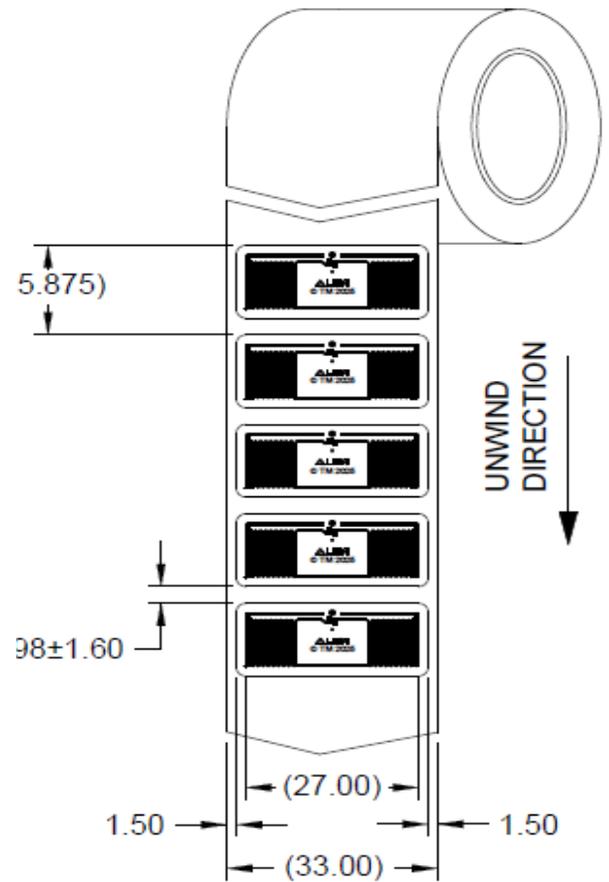
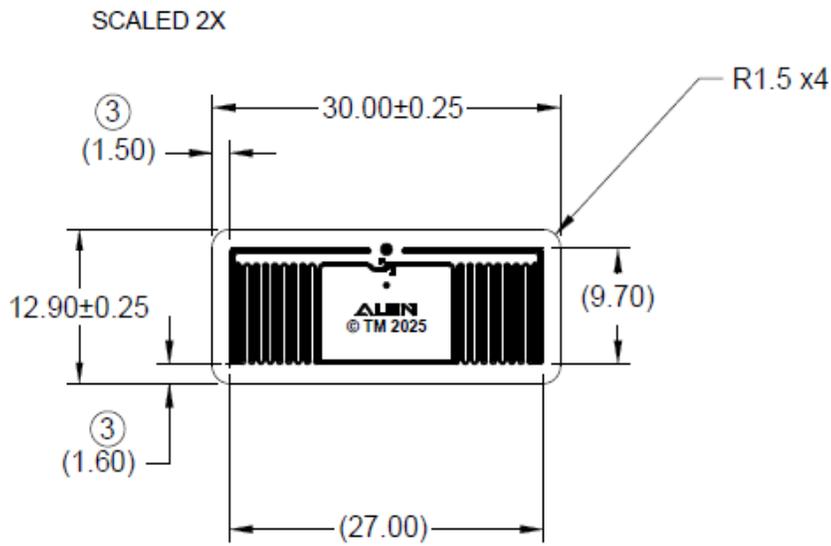






ALN-10015-WRW Wet White Dimension

ALN-10015-WRW Wet Roll



Standard Alien Inlay rolls unwind with metal antenna side facing outward, with respect to the core.

All dimensions in millimeters unless specified otherwise. They are not to scale



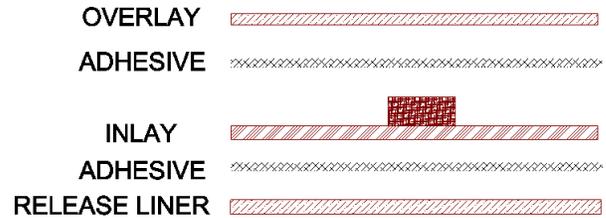
### ALN-10015 Inlay Stackup

DRY INLAY THICKNESS, $\pm 10\%$	
OVER ANTENNA	0.05 mm
OVER CHIP	0.25 mm

WHITE WET INLAY THICKNESS, $\pm 10\%$	
OVER ANTENNA	0.16 mm
OVER CHIP	0.36 mm

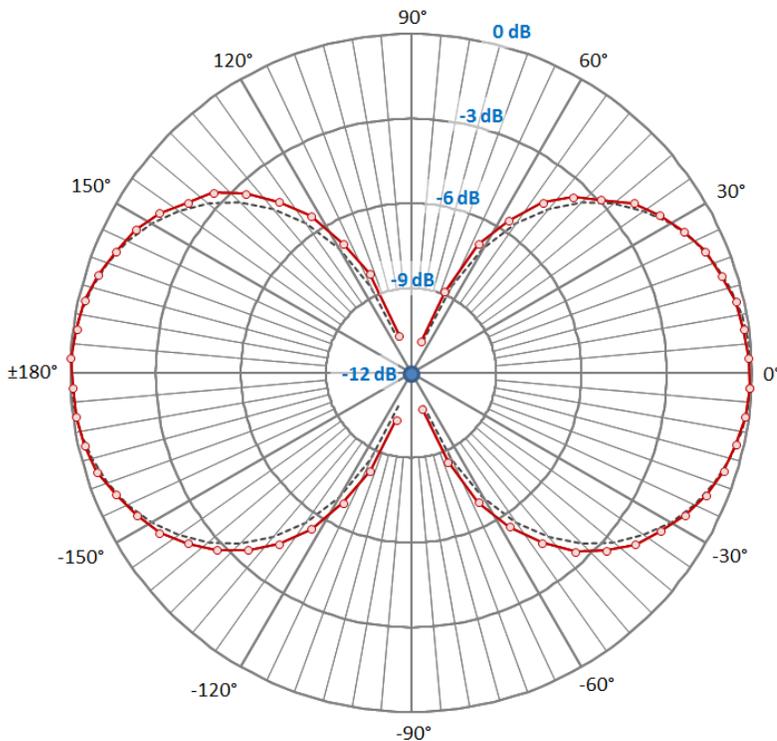


ALN-10015-R  
(Dry Unsilt Inlay)

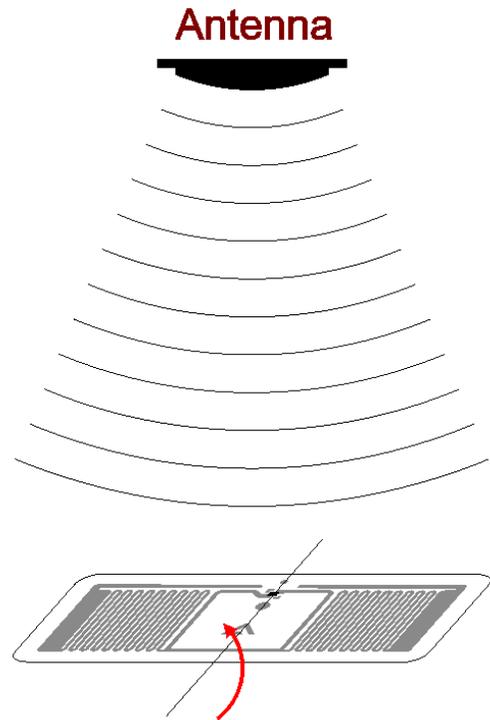


ALN-10015-WRW  
(White Wet Inlay)

### ALN-10015 Inlay Angular Sensitivity



Angular Sensitivity  
(Relative Read Range vs. Orientation)



Angular Sensitivity  
Inlay is rotated in the x, y, plane about the z axis



### ALN-10015 Specifications

#### Dry Inlay

Antenna Width	1.06" [27mm]
Antenna Length	0.38" [9.7mm]
Web Width	1.575" [40.0mm]
Web Pitch	0.625" [15.875mm]
Core Width	1.575" [40.0mm]
Core ID	6" [152.4mm]*
Core Material	Fiberboard
Inlays per Roll	20,000 Nominal
Maximum Roll OD	< 12" [304.8mm]
Roll Labeling Data	Roll #, Quantity

#### Wet Inlay

Inlay Width	1.18" [30mm]
Inlay Length	0.51" [12.9mm]
Web Width	1.23" [33mm]
Web Pitch	0.625" [15.875mm]
Core Width	1.23" [33mm]
Core ID	6" [152.4mm]*
Core Material	Fiberboard
Inlays per Roll	20,000 Nominal
Maximum Roll OD	< 16" [406.4mm]
Roll Labeling Data	Roll #, Quantity
White	TT Printable White Film Only
Overlay Adhesive	General Purpose Permanent
Inlay Adhesive	General Purpose Permanent
Adhesive Application Temperature	> +25°F [-4°C]
Adhesive Service Temperature	-40°F to +200°F [-40°C to +93.3°C]
Release Liner	40# SCK

#### Environmental

Shelf Life	Dry Inlays: 5 years at +77°F [+25°C] @ 40% RH Wet Inlays: 2 years at +77°F [+25°C] @ 40% RH
Recommended Storage	+77°F [+25°C] @ 40% RH
Storage Limits	-13°F to 122°F [-25°C to +50°C] 20% to 90% RH Non-condensing
Operating Limits	-40°F to +158°F [-40°C to +70°C] 20% to 90% RH Non-condensing
Bend Diameter	> 1.97" [50mm]
Pressure	< 5N/mm <sup>2</sup>
Drop Resistance	Per ASTM D5276
Write Cycles	200,000 @ 25°C
RoHs	2002/95/EC, 2005/618/EC, 2011/65/EU Compliant
REACH	1907/2006/EC Compliant (SVHC and ECHA)
ESD Limit- HBM / CDM	5.0kV / 1.5kV

#### RFID

Protocols Supported	ISO/IEC 18000-6C EPCglobal Class 1 Gen 2
Integrated Circuit	Alien Higgs-10
Operating Frequency	840-960 MHz
EPC Size	Up to 128 Bits
User Memory	32 Bits
TID	32 Bits
Unique TID	48 Bits
Access Password	32 Bits
Kill Password	32 Bits

\* Shipped with 6" to 3" plastic core adapter

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 HANDLING PRECAUTIONS Observe standard handling practices to minimize ESD.  
 DISCLAIMER Application recommendations are guidelines only - actual results may vary and should be confirmed. This is a general purpose product not designed or intended for any specific application.

This product is covered by one or more of the following U.S. patents: 7967204, 7931063, 7868766, 7737825, 7716208, 7716160, 7688206, 7659822, 7619531, 7615479, 7598867, 7580378, 7576656, 7562083, 7561221, 7559486, 7559131, 7554451, 7551141, 7542301, 7542008, 7531218, 7522055, 7500610, 7489248, 7453705, 7425467, 7417306, 7411503, 7385284, 7377445, 7364084, 7353598, 7342490, 7324061, 7321159, 7301458, 7295114, 7288432, 7265675, 7262686, 7260882, 7253735, 7244326, 7218527, 7199527, 7193504, 7173528, 7172910, 7172789, 7141176, 7113250, 7101502, 7080444, 7070851, 7068224, 7046328, 6998644, 6988667, 6985361, 6980184, 6970219, 6952157, 6942155, 6933848, 6927085, 6816380, 6780696, 6731353, 6693384, 6683663, 6665044, 6657289, 6623599, 6606247, 6606079, 6590386, 6586338, 6583744, 6555408, 6527964, 6479395, 6468638, 6420266, 6316278, 6291896, 6281038. Other patents pending.

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