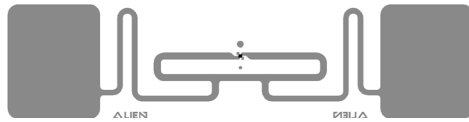




ALN-10062

SHORT INLAY (HIGGS™-10)

The Alien Technology® ALN-10062 “Short” RFID inlay is a narrow, high-performance, Higgs™-10 based member of the Squiggle® family and brings all the Higgs™-10 advantages to highly-effective “Short” Inlay.



Applications

- Volume Retail/Apparel
- Enterprise Wide Asset Management
- Warehouse Management
- Tracking Challenging Materials and Objects

FEATURE	DESCRIPTION	BENEFIT
Next generation Higgs™-10 read/write performance in the highly-efficient “Short” Squiggle family tag	One of Aliens best performing general-purpose tags boosted by Higgs™-10 performance and features.	Highly efficient smaller form-factor tag, still robust, proven and reliable.
Optimized 512 bit memory footprint	Optimized for both high-performance and high-volume applications	Designed to drive down the cost-of-ownership while increasing efficiencies of RFID solutions in large enterprises
New error correcting Sentinel™ Memory and best-In-class reliability.	A unique and robust error correcting memory architecture fixes single bit errors and flags dual bit errors. 200,000 write cycles, two times that of competitors.	Provides customers reassurance the stored data is protected and data loss/corruption minimized. More robust memory for high-write applications.

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 volume focused Higgs™-10 UHF RFID IC and innovative Short antenna design, the ALN-10062 delivers industry leading EPC Gen 2 read and write performance in a narrower width than it’s bigger brother, the Squiggle®.

ALN-10062 inlays are *World Tag* compliant, enabling consistent operation across the diverse frequencies of the Americas, Europe, Middle East, Asia, and Africa.

With its Higgs™-10 core, the Short delivers next generation performance and a rich feature set, yet is completely optimized for the highest volume enterprise, retail, and apparel applications.

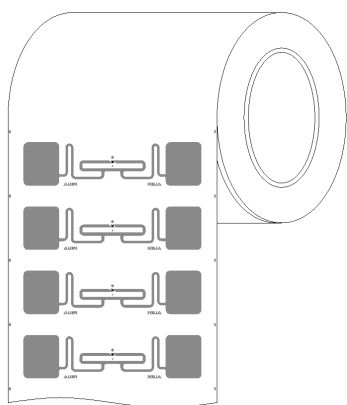
Enhanced memory footprint includes a **48-bit Unique TID for authentication and serialization applications and password protected read and write** support to prevent unauthorized viewing and modification of the tag’s data.

Typical applications for the Short include, but are not limited to, corrugate cases, pallet placard labels, apparel hang tags, shipping labels, asset management, file folder labels, and application on plastics.

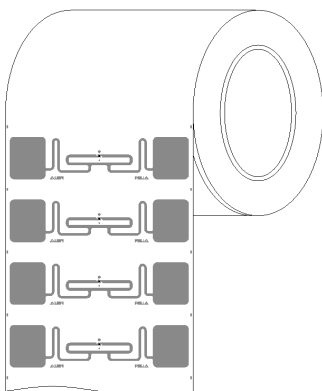


ALN 10062 Short Inlay

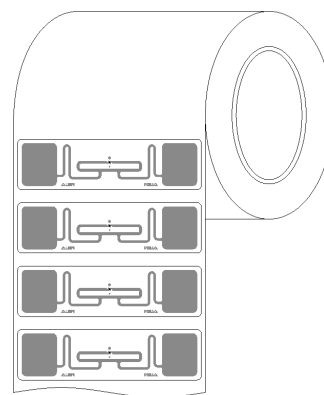
ALN-10062 Inlay Orientation



ALN-10062-R
(Dry Unslit Roll)



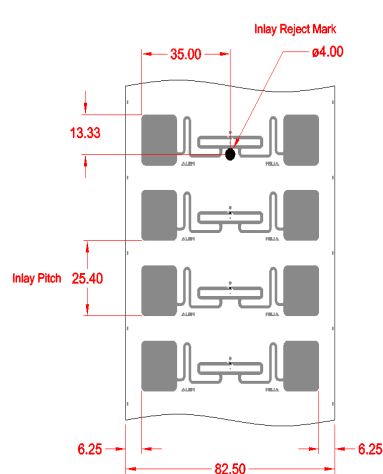
ALN-10062-SR
(Dry Slit Roll)



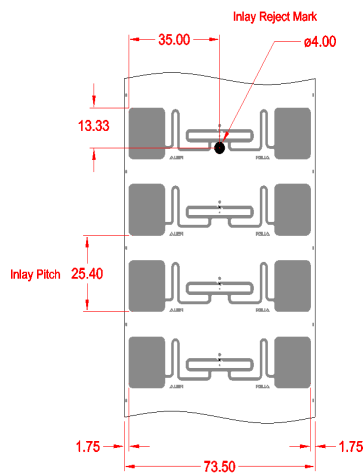
ALN-10062-WRW / WRC
(White / Clear Wet Inlay)

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

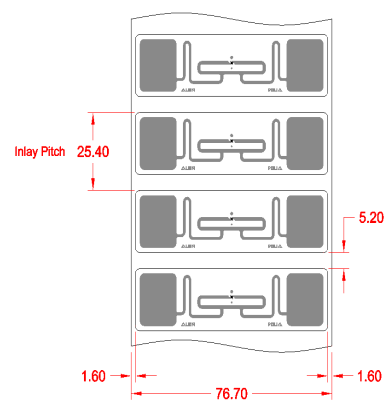
ALN-10062 Inlay Specification



ALN-10062-R
(Dry Unslit Roll)

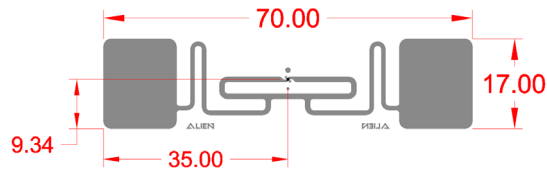


ALN-10062-SR
(Dry Slit Roll)

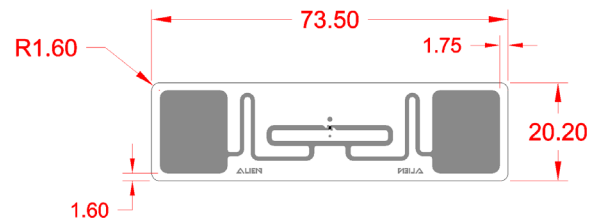


ALN-10062-WRW / WRC
(White / Clear Wet Inlay)

ALN-10062 Inlay General Dimensions



ALN-9862-R / SR
(Dry Unslit / Slit Inlay)



ALN-9862-WRW / WRC
(White / Clear Wet Inlay)

ALN-10062 Inlay Stackup

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

CLEAR WET INLAY THICKNESS, $\pm 10\%$	
OVER ANTENNA	0.08 mm
OVER CHIP	0.28 mm

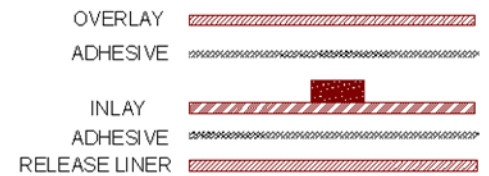
WHITE WET INLAY THICKNESS, $\pm 10\%$	
OVER ANTENNA	0.16 mm
OVER CHIP	0.36 mm



ALN-10062-R / SR
(Dry Unslit / Slit Inlay)

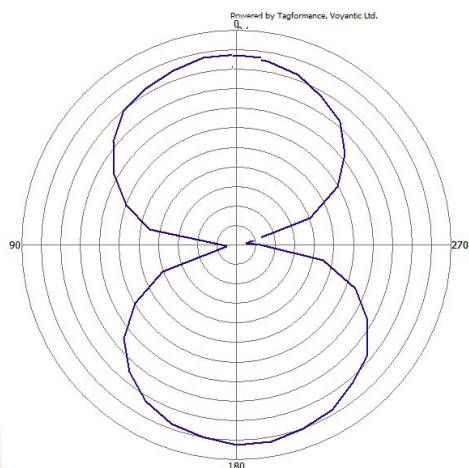


ALN-10062-WRC
(Clear Wet Inlay)

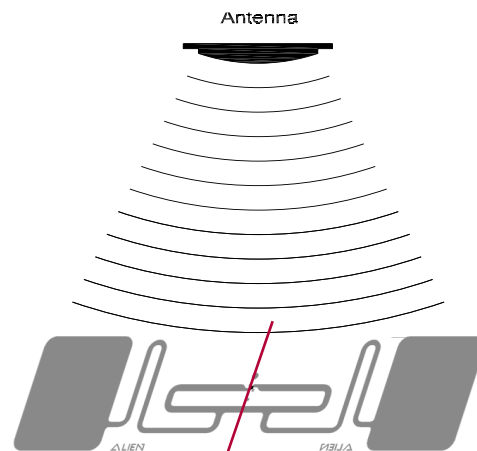


ALN-10062-WRW
(White Wet Inlay)

ALN-10062 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-10062 Specifications

Dry Inlay		Environmental	
Antenna Width	2.756" [70mm]	Shelf Life	Dry Inlays: 5 years at +77°F [+25°C] @ 40% RH
Antenna Length	0.669" [17mm]		Wet Inlays: 2 years at +77°F [+25°C] @ 40% RH
Web Width (-R)	3.25" [82.5mm]	Recommended Storage	+77°F [+25°C] @ 40% RH
Web Width (-SR)	2.89" [73.5mm]		-13°F to 122°F [-25°C to +50°C]
Web Pitch	1.0" [25.4mm]	Storage Limits	20% to 90% RH Non-condensing
Core Width (-R)	3.25" [82.5mm]		-40°F to +158°F [-40°C to +70°C]
Core Width (-SR)	2.89" [73.5mm]	Operating Limits	20% to 90% RH Non-condensing
Core ID	6" [152.4mm]*	Bend Diameter	> 1.97" [50mm]
Core Material	Fiberboard	Pressure	< 5N/mm ²
Inlays per Roll	12,500 Nominal	Drop Resistance	Per ASTM D5276
Maximum Roll OD	< 12" [304.8mm]	Write Cycles	200,000 @ 25°C
Roll Labeling Data	Roll #, Quantity	RoHs	2002/95/EC, 2005/618/EC, 2011/65/EU Compliant
Wet Inlay		REACH	1907/2006/EC Compliant (SVHC and ECHA)
Inlay Width	2.89" [73.5mm]	ESD Limit- HBM / CDM	5.0kV / 1.5kV
Inlay Length	0.795" [21.2mm]	RFID	
Web Width	3.02" [76.7mm]	Protocols Supported	ISO/IEC 18000-6C EPCglobal Class 1 Gen 2
Web Pitch	1.0" [25.4mm]	Integrated Circuit	Alien Higgs™-10
Core Width	2.874" [73.0mm]	Operating Frequency	860-960 MHz
Core ID	6" [152.4mm]*	EPC Size	Up to 128 Bits
Core Material	Fiberboard	User Memory	32 Bits(w/96 Bits EPC)
Inlays per Roll	12,500 Nominal	TID	32 Bits
Maximum Roll OD	< 16" [406.4mm]	Unique TID	80 Bits
Roll Labeling Data	Roll #, Quantity	Access Password	32 Bits
Overlay	TT Printable White Film	Kill Password	32 Bits
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		

* Shipped with 6" to 3" plastic core adapter

July 28, 2016

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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, 7214569, 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, 6590346, 6586338, 6566744, 6555408, 6527964, 6479395, 6468638, 6420266, 6316278, 6291896, 6281038. Other patents pending.

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