The Alien Technology® ALN-9730 "Squiglette" is a narrower version of its high-performance, general-purpose Higgs™ 4 Squiggle® sibling. Brings all the Higgs™ 4 advantages to highly-effective "Squiglette" Inlay.

Applications

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

FEATURE	DESCRIPTION	BENEFIT
Next generation Higgs™ 4 read/write performance in the highly-efficient "Squiglette" Squiggle family tag	One of Alien's best performing general purpose tags boosted by Higgs™ 4 performance and features.	Highly effeicient, smaller form-factor tag, still robust, proven, and reliable.
Optimized 448 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

Features:

› Designed to meet EPCglobal Gen2 (V 1.2.0) and ISO/IEC 18000-6C

› Worldwide operation in the RFID UHF bands (840-960 MHz)

› 448-Bits of NVRAM Memory
  - 128-EPC Bits
  - 128 User Bits
  - 64 Bit Unique TID
  - 32 Bit Access and 32 bit Kill Passwords

› Pre-Programmed with a unique, unalterable 64-bit serial number

› User Memory can be Block Perma-Locked as well as read password protected in 32 Bit Blocks

› Low power operation for both read and program

› Dynamic Authentication™ - anti-cloning/anti-counterfeit technology

› Exceptional operating range, up to 11m with appropriate antenna.

› Available in high-yield, high capacity dry/wet inlay rolls

Product Overview:

Powered by Alien®'s volume focused **Higgs™ 4 UHF RFID IC** and innovative **Squiglette** antenna design, the ALN-9730 delivers industry leading EPC Gen 2 read and write performance in a narrower width than it's bigger brother, the Squiggle®.

ALN-9730 inlays are *World Tag* compliant, enabling consistent operation across the diverse frequencies of the Americas, Europe, Middle East, Asia, and Africa.

With its Higgs-4 core, the Squiglette delivers next generation performance and a rich feature set, yet is completely **optimized for the highest volume enterprise, retail, and apparel applications**.

An optimized memory footprint includes a 32-bit TID, a **64-bit Unique TID for authentication** and **next generation serialization** applications, a **128-bit EPC memory** bank, 128-bits of user memory for distributed data applications, and **password protected read and write** support capabilities to prevent unauthorized viewing and modification of the tag's data.

Typical applications for the Squiglette include, but are not limited to, apparel hang tags, corrugated cases, pallet placard labels, shipping labels, asset management, file folder labels and applications on plastics.
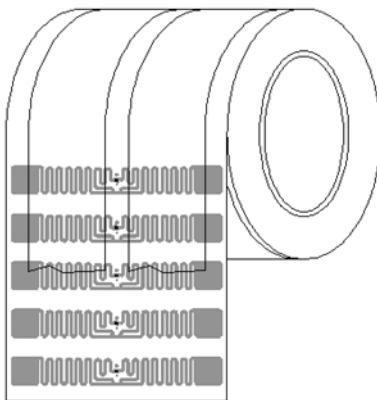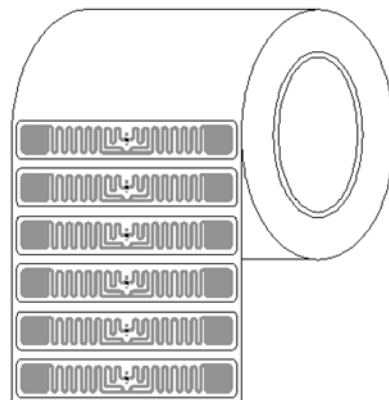
ALN-9730 Inlay Orientation
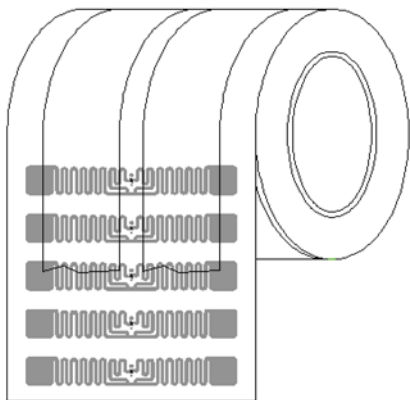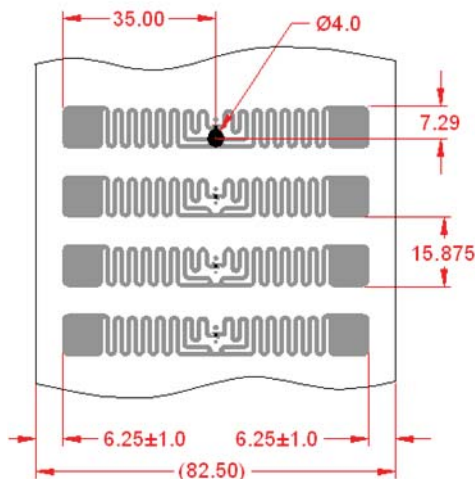
ALN-9730-R
(Dry Unslit Roll)
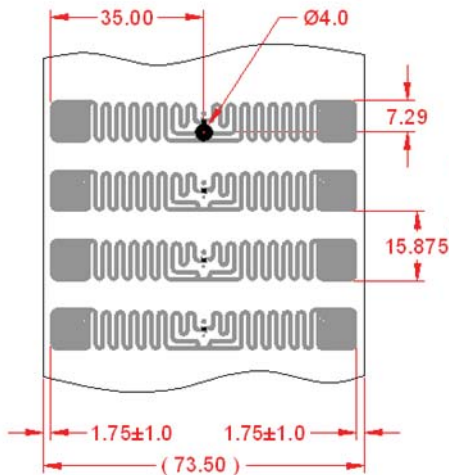
ALN-9730-SR
(Dry Slit Roll)

ALN-9730-WRC / -WRW
(Clear / White Wet Inlay)

Standard Alien Inlay rolls unwind with metal antenna side facing outward, with respect to the core.
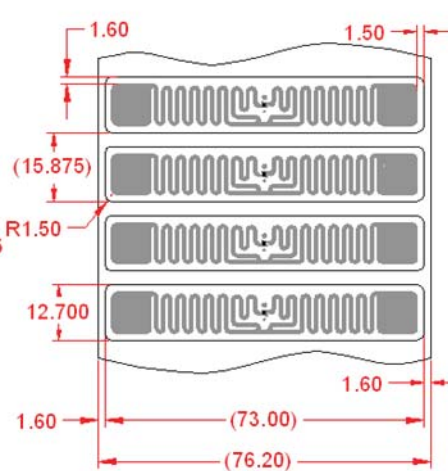
ALN-9730 Inlay Specification

ALN-9730-R
(Dry Unslit Roll)

ALN-9730-SR
(Dry Slit Roll)

ALN-9730-WRC / -WRW
(Clear / White Wet Inlay)

ALN-9730 Inlay Stackup

DRY INLAY THICKNESS, ±10%	
OVER ANTENNA	0.05 mm
OVER CHIP	0.25 mm

CLEAR WET INLAY THICKNESS, ±10%	
OVER ANTENNA	0.08 mm
OVER CHIP	0.28 mm

WHITE WET INLAY THICKNESS, ±10%	
OVER ANTENNA	0.16 mm
OVER CHIP	0.36 mm

ALN-9730-R / -SR
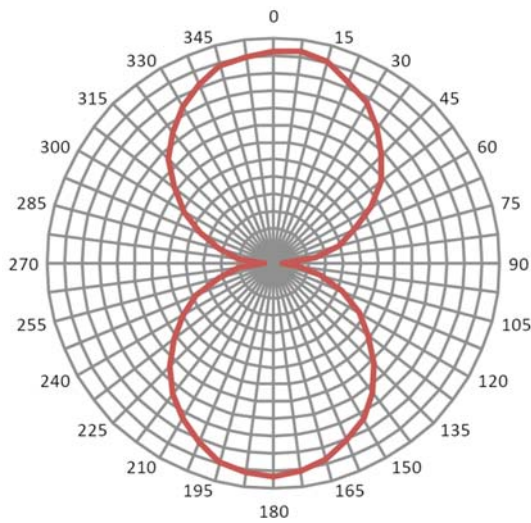**(Dry Unslit / Slit Inlay)**
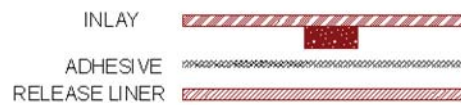
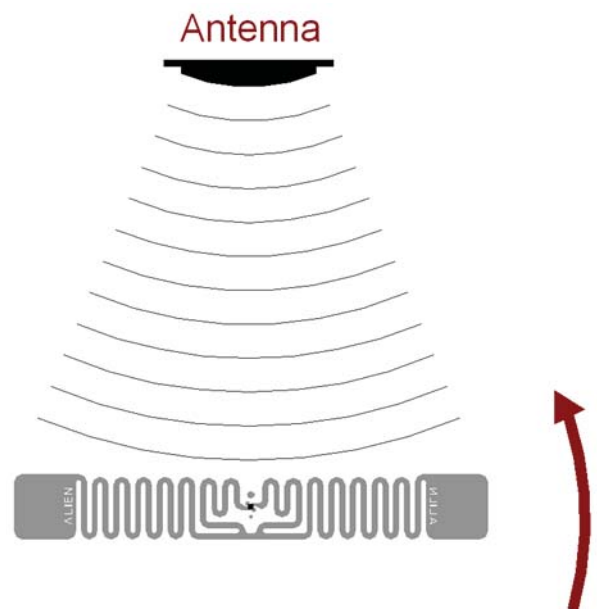**ALN-9730-WRC**
(Clear Wet Inlay)
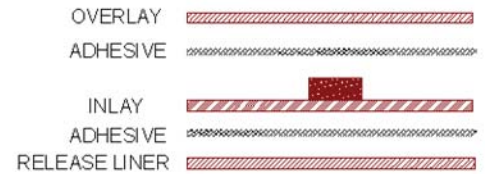
ALN-9730 -WRW
(White Wet Inlay)

ALN-9730 Inlay Angular Sensitivity

Angular Sensitivity
(Relative Read Range vs. Orientation)

Angular Sensitivity
Inlay is rotated in the x, y, plane about the z axis
(tag shown at 0° with respect to face of antenna)

ALN 9730 Squiglette Inlay

ALN-9730 Specifications

Dry Inlay

Antenna Width	2.756″ [70mm]
Antenna Length	0.374″ [9.5mm]
Web Width (-R)	3.25″ [82.5mm]
Web Width (-SR)	2.89″ [73.5mm]
Web Pitch	0.625″ [15.875mm]
Core Width (-FR)	3.25″ [82.5mm]
Core Width (-SR)	2.89″ [73.5mm]
Core ID	6″ [152.4mm]*
Core Material	Fiberboard
Interleaf Material	Paper
Interleaf Width	1.0″ [25.4mm]
Inlays per Roll	20,000 Nominal
Maximum Roll OD	< 12″ [304.8mm]
Roll Labeling Data	Roll #, Quantity

Wet Inlay

Inlay Width	2.87″ [73mm]
Inlay Length	0.5″ [12.7mm]
Web Width	3.0″ [76.2mm]
Web Pitch	0.625″ [15.875mm]
Core Width	3.0″ [76.2mm]
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
Clear (-WRC)	PET base without Overlay
White (-WRW)	TT Printable White Film Only
Overlay Adhesive (-WRW)	General Purpose Permanent
Inlay Adhesive	General Purpose Permanent
Adhesive Application Temperature	> +25ºF [-4ºC]
Adhesive Service Temperature	-40ºF to +200ºF [-40ºC to +93.3ºC]
Release Liner	40# SCK

Environmental

Shelf Life	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/mm²
Drop Resistance	Per ASTM D5276
Write Cycles	100,000 @ 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-4
EPCglobal Certificate	950110126000001084
Operating Frequency	840–960 MHz
EPC Size	128 Bits
User Memory	128 Bits
TID	32 Bits
Unique TID	64 Bits
Access Password	32 Bits
Kill Password	32 Bits

* Shipped with 6″ to 3″ plastic core adapter

atlasRFIDstore.com

Inside USA | 1.888.238.1155
Outside USA | 1.205.383.2244
Email:
info@atlasRFIDstore.com
www.atlasRFIDstore.com