



## AD-622 RFID Inlays

**RF Protocol**  
ISO/IEC 18000-6C  
EPC Class 1 Gen 2

**Optimized Operating Frequencies**  
902-928 MHz (US)

**Antenna Size**  
3.35 in x 3.75 in



- Orientation-insensitive antenna provides superior performance when tag-to-reader orientation is not optimal (i.e. pallets)
- Improved performance in high-volume corrugated box labeling applications on difficult case contents such as metals and liquids
- Available in high-yield/high-capacity rolls which integrate seamlessly into high-volume converting processes

# AD-622 RFID Inlays


## RF Performance Features

Optimized operating frequency	902-928 MHz (US)
Mode of operation	Passive (battery free)
RF performance	3D orientation insensitive read performance. Strong equidistant read range suited for pallet tag reading at any angle.

## Protocol and Memory

Protocol	ISO/IEC 18000-6C EPC Class 1 Gen 2
EPC memory allocation	96 bits

## Inlay Roll Format/Finishing

Un-wind direction	
Core size [mm]	3 in [76]
Maximum roll outer diameter (not to exceed) [mm]	16 in [406]
Average number of units per roll	5000

## Environmental Specifications

Operating temperature	-40° F to +149° F -40° C to +65° C
Storage temperature	-40° F to +185° F -40° C to +85° C
Humidity (recommended)	40% to 80% RH

## Dry Inlay Specifications

Antenna dimensions [mm]	3.35 in [85] x 3.75 in [95.2]
Standard pitch [mm]	4.125 in [104.8]
Standard web width [mm]	3.88 in [98.4]
Inlay substrate material and thickness [microns]	Heat-treated PET, 2 mils [51]
Shelf life	2 years
Quality assurance	100% read tested with out-of-tolerance inlay marked

## Pressure-Sensitive Inlay Specifications

Die cut dimensions [mm]	3.5 in [88.9] x 3.88 in [98.6]
Standard pitch [mm]	4.125 in [104.8]
Standard web width [mm]	4 in [101.6]
Inlay to liner adhesive	S490 (Fasson®)
Liner material	40# SCK (Fasson®)
Total thickness over chip (typical) [microns]	14 mils [356]
Shelf life	1 year
Quality assurance	100% edit and replace



## Real-World™ RFID

Avery Dennison RFID focuses the resources of a global Fortune 500 company on developing the tags your customers need in the real world, including (*clockwise from top*):

**AD-220:** economical plug-and-play solution for reliable high printer yields and throughput;

**AD-612:** a truly wide-band tag with consistent and reliable high performance in many countries of the world;

**AD-622:** orientation-insensitive 3D read capability for pallet tags and applications with awkward read angles;

**AD-812/811:** enhanced edge-on reading capability for pharma and item-level applications;

**AD-420/421:** a position-insensitive tag to fit many applications;

**AD-820/821:** enhanced edge-on reading designed for garment hang tags and other item-level applications.



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