



AD-420 & AD-421 RFID Inlays

RF Protocol

ISO 18000-6C
EPC UHF Class 1 Gen 2

Operating Frequency Range

AD-420 – 902-928 MHz
AD-421 – 865-868 MHz

Antenna Size

3.70 in x 1.26 in



Carton & Pallet



RF-friendly



Reflective



Absorptive

- High 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-420 & AD-421 RFID Inlays

RF Performance Features

Operating frequency range	
AD-420	902-928 MHz
AD-421	865-868 MHz
Mode of operation	Passive (battery free)
RF Performance	Content insensitive tag provides superior performance on RF-friendly, reflective and absorptive contents

Protocol and Memory

Protocol	EPC UHF Class 1 Gen 2 ISO 18000-6C
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 (thousands)	5

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]	3.70 in [94] x 1.26 in [32]
Available pitch [mm]	2.125 in [53.98]
Available web width [mm]	4.75 in [120.65]
Inlay substrate material and thickness [microns]	Heat-treated PET, 2 mils [51]
Total thickness over chip (typical) [microns]	11.5 mils [279]
Shelf life	2 years
Quality assurance	100% read tested with out-of-tolerance inlay marked

PS Inlay Specifications

Die cut dimensions [mm]	3.70 in [94] x 1.50 in [38.18]
Available pitch [mm]	2.125 in [53.98]
Available web width [mm]	4.125 in [104.78]
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

