# J91-A1

# **UHF RFID TAG FOR DENSE READABILITY**



J91-A1 UHF RFID tag is used for tracking every single sterilization package, withstanding pulse vacuum steam sterilization cycles. With JRI hand-held reader, it contributes to highly efficient and accurate inventory control. With JRI RFID printer, it realizes visual reading of package information.



## **FEATURES:**

- Global GS1 Class1 Gen2 (V.2.0.1) and ISO/IEC 18000-6C compliance
- Worldwide operation in all RFID UHF bands (860MHz-960MHz)
- High performance for the dense tagged applications
- 128-bit of EPC memory
- Supports pre-serialization for 96-bit EPC
- 96-bit Tag Identifier (TID) factory locked
- 0-bit User Memory
- 32-bit kill and 32-bit access password
- Minimum 100k write cycle endurance
- Seamless operation with currently deployed RFID hardware
- 95\*10mm dimension,compatible with all standard far-field RFID reader antennas

#### **OVERVIEW:**

As sterilization packages with UHF RFID tags can be identified in groups or in a trolley, the efficiency of packages collection and delivery is greatly improved in CSSD. Besides, the phenomenon of missing and wrong delivery is also avoided. With JRI RFID printer, it realizes visual reading of package information, e.g. sterilization date, expiry date, sterilizer type, batch number, department name.

J91-A1 is developed for mid-size densely tagged applications, based on NXP Ucode 8 IC and 95\*10mm omni-directional antenna, and offers more robust performance for medical applications. This UHF RFID tag conforms to the frequency band of various regions such as Japan, America, Europe, China, Middle East, Africa.

LABEL			
Label Width	30mm		
Label Length	100mm		
Reel Web Width	100±1.0mm		
Reel Inner Core Diameter	3"(76.2mm)		
Reel Core Thickness	5±2mm		
Reel Core Material	Fiberboard		
Inlay Roll	5000pcs		
Roll Labeling Info	Roll ID、Quantity		

<b>Environment Requirements</b>			
Operating Humidity	20% ~ 80% RH		
Operating Temperature	− 5 ~ 60°C		
Storage Humidity	20% ~ 60% RH		
Storage Temperature	20 ~ 30°C		
Shelf Life	From the date of manufacture,1 year in anti-static bag at 20 ~ 30°C / 20% ~ 60% RH),and avoid direct sunlight exposure		

Electrical Characteristics				
Item		Description	Remarks	
Face Material		66g 63um polyolefin film		
Bottom Material		56um Release paper	UPMUERC1828U1	
Manufacture / IC		Ucode 9		
Base Material		PET		
Antenna		Etched Aluminum (10μm)+ PET (50μm)		
Protocol		ISO/IEC 18000-6C		
Memory	EEPROM	96 Bits	Read & Write	
	User Memory			
	TID	96 Bits	Read Only	
	Password	32Kill password	Read & Write	
Frequency		860-960MHz		
Operating Mode		Passive		
IC Life		100,000 Programming cycles,50 years data retention		
ESD Voltage Immunity		Max. 2000V	Human Body Mode(HBM)	

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