

J53-A1

UHF RFID TAG FOR DENSE READABILITY



J53-A1 UHF RFID tag by JRI-RFID provides more robust performance, with the size of 50*30mm, used for tracking every single sterilization package. With JRI hand-held reader, it realizes more efficient and accurate inventory control. J53-A1 tag is optimized for densely tagged applications.



FEATURES:

- Global GS1 Class 1 Gen 2 (V.2.0.1) and ISO/IEC 18000-6C compliance
- Worldwide operation in all RFID UHF bands (860MHz-960MHz)
- High performance for the densely 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
- 50*30mm dimension, compatible with all standard far-field RFID reader antennas

OVERVIEW:

J53-A1 is developed for mid-size densely tagged applications, it is based on NXP Ucode 8 IC and 50*30 omni-directional antenna, and offers more robust performance for medical applications.

J53-A1 tags are world tag compliant, enabling consistent operation across the diverse frequencies of Japan, USA, Europe, China, Middle East, Africa, etc.

DRY INLAY

Antenna Width 30mm

Antenna Length 50mm

Web Width 53.5mm

Web Pitch 34.925mm

Core Width 53.5mm

Core Material Fiberboard

Inlay Roll 6000pcs

Roll Labeling Info Roll ID, Quantity

ENVIRONMENTAL

Operating Humidity 20% ~ 90% RH

Operating Temperature -40℃ ~ +70℃

Recommended Storage +25℃@40% RH

Shelf Life for Dry 5 years at +25℃@40% RH

Shelf Life for Wet 2 years at +25℃@40% RH

Bend Diameter >50mm

Pressure <5N/mm2

ESD (human body model) ±2kV

LABEL

Label Width 33mm

Label Length 53mm

Web Width 56mm

Web Pitch 34.925mm

Core Width 56mm

Core material Fiberboard

Tag Roll 6000pcs

Roll Labeling Info Roll ID, Quantity

RFID

Protocols Supported GS1 Class1 Gen2

Operating Frequency ISO/IEC 18000-6C

EPC 128 bits

TID 96 bits

RESERVED 64 bits

USER 0 bit

Write Cycle >100k

TAG PERFORMANCE COMPARING WITH NORMAL RETAIL TAG

TEST CONDITION

RETAIL TAG A

JRI J53-A1

Single Tag on Cardstock -17.5dBm -17.5dBm

Single Tag on Denim article -16dBm -18.5dBm

Single Tag on Polybag -16dBm -18.5dBm

Single Tag between Two Denim articles -17dBm -17dBm

Single Tag in-near with Metal Plate 1dBm -6dBm

Multi Tags Spaced Close 4dBm -12dBm