



## RFID TAGS

HRT - 1000

RFID tags are fixed to all the library items (books, CDs, etc.). RFID tags are the key for the entire solution.

2CQR's RFID tags are designed to provide libraries with the best performance and durability.

## DETAILS:

- Tag size is 81mm X 69mm with more than 2048 bits memory, rewritable, multi-read antitheft and good quality self-adhesive.
- Tag Size are appropriate for books, CDs, DVDs, Loose Periodicals/Magazine, non book material etc
- The tags are self-adhesive and paperbacked with Life-time Warranty.(Minimum 20 years or 1,00,000 read/write operations)
- Compliant with ISO standards Self-adhesive and in proper format to paste on Books & CDs/DVDs
- The RFID chip used is designed specifically for Library use i.e. it have three sections:Lockable, Rewritable and Security function(EAS/AFL) for item anti-theft
- Security Function- can be activated and deactivated

## SPECIFICATIONS:

<b>Electrical Characteristics &amp; General characteristics of transponder</b>
• Integrated Circuit (IC) Philips i-Code-SLIX.
• ICS protocol/ anti-collision ISO 15693/18000-3.
• Memory 2048 bits R/W EEPROM.
• Unloaded resonance frequency : 14.15 MHz $\pm$ 0.30 MHz
• Operating temperature (electronics parts): -00C to +400C or above.
• Antenna type: Aluminum
• Operating frequency 13.56 MHz.
• ESD voltage immunity +12 kV peak. HBM
• Bending diameter (D) > 50 mm. tension less than 10 N
• Static pressure (P) < 10 MPa (10 N/mm <sup>2</sup> )
• Retention life: 50 years or 1,00,000 read/write operations
• Integrated Circuit: NXP ICode SLIX2. The thickness of the IC in the tags should not exceed 127 $\mu$ m.
• Minimum delivery yield of 97%

## MECHANICAL DIMENSIONS:

A1 x A2	Coil Size	45 x 76 mm	± 0.5 mm	1772 x 2992 in
B1 x B2	Die-cut Size	49 x 81 mm	± 0.2 mm	1929 x 3189 in
C	Web Width	53 mm	± 0.5 mm	2087 in
D	Pitch, Length per piece MD	85 mm	± 1.5 mm	3346 in
E	Die-cut to Web Edge	2 mm	± 1.5 mm	0079 in
F	Die-cut to Register Mark	0.5 mm	± 1.0 mm	0020 in
G	Coil to die-cut (MD)	2.5 mm	± 1.5 mm	0098 in
H	Coil to die-cut (CD)	2 mm	± 1.5 mm	0079 in
	Thickness of the IC	120 µm	± 15%	
	Overall thickness of transponder package(excluding IC and Siliconized paper)	208 µm	± 10%	
	Thickness of the Siliconized paper	56 µm	± 5%	

