

## Tag-it™ HF-I PRO TRANSPONDER INLAYS CD

**FEATURES**

- **ISO/IEC 15693-2,-3; ISO/IEC 18000-3 Compliant**
- **13.56 MHz Operating Frequency**
- **256 Bit User Memory in 8x32-bit Blocks**
- **User and Factory Lock per Block**
- **Application Family Identifier (AFI)**
- **Fast Simultaneous Identification (Anti-collision)**
- **Password Protected Write Command**
- **Command to Disable IC Functionality**

**APPLICATIONS**

- **Product Authentication**
- **Ticketing**
- **Stored Value**

**DESCRIPTION**

Texas Instruments' Tag-it HF-I Pro Transponder Inlays consist of 13.56 MHz high frequency (HF) transponders that are compliant with the ISO/IEC 15693 and ISO/IEC 18000-3 global open standards. These products offer a user accessible memory of 256 bits, organized in 8 blocks and an extended command set including Password Protect Write available in five different antenna shapes with frequency offset for integration into paper, PVC or other substrates.

Tag-it HF-I Pro Transponder Inlays are manufactured with TI's patented laser tuning process to provide consistent read performance. And prior to delivery, the transponders undergo complete functional and parametric testing in order to provide the high quality that customers have come to expect from TI.

The Tag-it HF-I Pro Transponder Inlays are well suited for a variety of applications including *but not limited to*: product authentication, library applications, supply chain management, asset management, and ticketing/stored value applications.

**SPECIFICATIONS**

PART NUMBER	RI-I17-114A-S1
Supported Standard	ISO/IEC 15693-2,-3; ISO/IEC 18000-3
Recommended Operating frequency	13.56 MHz
Passive Resonance Frequency (at +25°C)	13.80 MHz ± 400kHz (includes frequency offset to compensate further integration into paper or PVC lamination)
Typ. required activation field strength to read (at +25°C)	110 dB $\mu$ A/m #
Typ. required activation field strength to write (at +25°C)	113 dB $\mu$ A/m #
Factory programmed Read Only Number	64 bits
Memory (user programmable)	256 bits organized in 8 x 32-bit blocks
Typical programming cycles (at +25°C)	100,000
Data retention time (at +55°C)	> 10 years
Simultaneous Identification of Tags	Up to 50 tags per second (reader/antenna dependent)
Antenna size	Outer diameter: $\varnothing$ 32.5 mm +0.1mm/-0.2mm (~1.28 in) Inner diameter: min. $\varnothing$ 18 mm (~0.7 in)
Foil width	48 mm ± 0.5 mm (1.89 in ± 0.02 in)
Foil pitch	50.8 mm +0.1mm/-0.4mm (2 in)
Base material	Substrate: PET (Polyethylenetherephthalate) Antenna: Aluminum
Operating temperature	-25°C to +70°C

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Mailing Address: Texas Instruments  
Post Office Box 655303 Dallas, Texas 75265

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