# RFID Electronic Seal

(RFID E-Seal)





# **User Guide**

# Size Specification

Length	117.5 ± 2 mm	
Width	24 ± 1 mm	
High	24 ± 1 mm	
Weight	65.5 ± 2 g	
DIN		



#### PIN

Length	76.8 ± 2 mm
Weight	21.2 ± 1 mm
Weight	35.5 ± 1 g



## BUSH

Length	60 ± 1mm
Weight	24 ± 1 mm
Weight	29.7 ± 1 g



## **Electronic Characteristic**

**RFID Feature** 

Frequency	UHF 860~960 MHz
Protocol	EPC Global C1G2 (ISO 18000-6C)
Operating	2004 4 10000
temperature	-30°C to +80°C
Ingress	IDes
Protection	IP65

## **Tamper Proof Demand**

- 1. Can't be read before use.
- 2. Can be read when use.
- 3. Can't be read after cut





#### Reading Range (@4W EIRP) by Impinj R420

6 M

6 M





#### **ISO 17712:2013 Clause 4 and 5 Testing**



#### 財團法人会屬工業研究發展中心 區域研發服務處(中區)機械測試實驗室

407 台中市工事區 37 8 25 號, TEL: (01)23502169 Metal Industries Research & Development Centre Mechanical Testing Laboratory, Regional R&D Service Department (Taichung)

No.25, 37th Road, Industrial Park, Taichung City 407, Taiwan (R.O.C.) Date : 2015/12/16

Accreditation No. - E1126193-T01-C01



#### Certificate of Conformance for Freight Container Mechanical Seal Testing Seal Classification: High Security

Customer : TAG CO., LTD.

No.248, Xinyi St., Namou City, Namou County 54049, Taiwan (R.O.C.)

並克電子有限公司

**南投縣南投市信義的 248 號** 

Name of Article: HIGH SECURITY SEALS BOLT SEALS

Type : E Seal Serial No. : 03~26

Specification No. : ISO 17712:2013(E) Test Dates: 2015/12/02-2015/12/15



MIRDC .Certifies that 26 samples, 5 for each test and 1 for measurements, of the seal referenced above were subjected to the following tests

Test Item	Section Number	Classification
Minimum Diameter	4.1.3	Pusa
Tensile Test	5.2	High Security
Shear Test	53	High Security
Bending Test	5.4	High Security
Impact Test room temp	5.5	High Security
Impact Test reduced temp	5.5	High Security

Results: The above listed tests were completed with no discrepancies noted. Refer to test report number E1126193 T01 for complete details.

The test results contained herein pertain only to the specimens listed in this report. This report shall not be reproduced, except in full, without the written approval of MIRDC

Approved Signatory ' HCI,Chen-Ping Engineer ! CHANG Hst-Hut



Page 1 of 1

# **Passive RFID E-seal Memory**

## ISO 17712:2013(E) High Security E-seal



- 1. Color case
- 2. Color print
- 3. Barcode print
- 4. Company mark or logo print
- 5. UHF Reading Range 6M up
- 6. Powered by Higgs 4 or Monza 4
- 7. Frequency Range: 860-960MHz
- 8. Use only once

#### **Alien Higgs 4 Memory**

EPC	128 bit	TID	96 bit
User me	emory	128 bit	

#### **Impinj Monza 4E Memory**

EPC	496 bit	TID	96 bit
User mo	emory	128 bit	

For example: ABCD12345678

"ABCD" is the letter that need 8 bits ASCII

"12345678" is Hexadecimal that need 4 bit by HEX

Alien Higgs 4 total memory are 256 bits

Impinj Monza 4E total memory are 624 bits

Patent No.

US: US8319647, US8558700

TW: M395034, I385294, I400385, I426173, I441975

CN: CN102339408B, CN102542316B