

TiTAN Tag

Flexible Tag, Metal Tag



Flexible Tag - Laundry Tag



Metal Tag - Blade Tag



Metal Tag - Smallest Tag



Metal Tag - Fastener Tag



Metal Tag - General Tag



Metal Tag - Inch Tag



Metal Tag - Ultrathin Tag



»» Laundry Tag (Flexible Tag) Specification

Basic information

Protocol : EPC Class1 Gen2& ISO18000-6-C

Chip : Alien Higgs3

Chip bonding : Wire bonding

Chip memory : EPC 96 bits, User 512 bits, TID 64 bits,
CRC 32 bits

Dimensions : (L)68.0mm × (H)9.0mm × (T)0.4mm

Materials :

Double sided Dupont's KAPTON film (polyimide) laminated
copper etched antenna

- Withstands 200C degree / 40 bar
- Trample : Trample on tags with 50Kgs with 1m/second – 500 times
- supplies heat curable adhesive tape (by ironing) together with Laundry Tag.
- Polyurethane base film with double sided hot-melt adhesive layer
- Size: 67mm × 8mm
- Thickness : Polyurethane base film – 100 micro, Hot-melt adhesive – 80 micron meter

»» Metal Tag Specification

Dimensions

- TiTAN Inch : (L)26.0mm × (H)10mm × (T)3.2mm
Hole's diameter: 2.2mm
- TiTAN Smallest : US& JP type (L)38 × (H)10 × (T)3.2
EU type (L)39 × (H)10 × (T)3.2
Hole's diameter : 2.0mm
- TiTAN General : (L)75.0mm × (H)15.6mm × (T)3.2mm
Hole's diameter : 3.2mm
- TiTAN Fastener : (L)148.0mm × (H)18.2mm × (T)3.2mm
Hole's diameter : 5.5mm
- TiTAN Blade : (L)130mm × (H)6mm × (T)4.1mm
Hole's diameter : 3.2mm
- TiTAN Ultra Thin : (L)75.0mm × (H)15.6mm × (T)2.0mm
Hole's diameter : 3.2mm

Read Range (On Metal)

- **TiTAN Inch**
Fix Mount Reader : 1.0m / Handheld Reader : 0.5m
- **TiTAN Smallest**
Fix Mount Reader : 2.5m / Handheld Reader : 1.0m
- **TiTAN General**
Fix Mount Reader : 4.0m / Handheld Reader : 2.0m
- **TiTAN Fastener**
Fix Mount Reader : 7.0m / Handheld Reader : 3.5m
- **TiTAN Blade**
Fix Mount Reader : 6.0m / Handheld Reader : 3.0m
- **TiTAN Ultra Thin**
Fix Mount Reader : 2.0m / Handheld Reader : 0.8m

»» Common Specification

Merory

- EPC : 96bits
- User : 512bits
- Unique TID : 64bits
- Password : 32bits
- Kill : 32bits

Environment

- Humidity chamber test (85°C / 95°C RH Test) : 168 hours' chamber test at 85°C degree / 95% relative humidity
- High temperature test (200°C Test) : 6 hours' chamber test at 200°C degree
- Thermal cycling test (-45°C ⇔ 85°C Test) : Soaked 6 hours at 200°C degree boiling oil

※ Passes if difference between pre-chamber and post-chamber tag's resonant center frequency is below 5MHz

Ingression And Mechanical Shock

Ingression : IP68 :

Soaked 1.5 meter water depth for 24 hours

Vibration : IEC60068-2-6/64

- Vibrates tags with various frequency and gravity Iron ball free fall : 1 kilogram iron ball
- 1 Kg iron ball free fall from 1.5 meters' height on tags for 50 times at different angles

Attachment Metgods

1. Double side coated backing adhesive (Suggestions)

- <200C degree : 3M468MP (or 3M9472LE)
- >200C degree : SYT-120DL
- Harsh environment : 3M VHB 4913

2. Fast curing glues (Suggestions)

- Double components (24 hours curable) :
LOCTITE 331 + LOCTITE 7387
- Sigle component (Instantly curable) : ALTECO