

SPECIAL RFID TAG BIT BETA TAG



APPLICATIONS

- Small Hand Tools Tracking
- Weapon Management
- Surgical Instruments Tracking
- Mould Assets Management
- On Metal Asset Tracking

FEATURES

- Robust Ceramic Housing
- Up to 2 Meters Reading Range
- Adhesive Fixing, Moulding Embedded or Heat-Shrinkable Tubing
- IP68 Protection Class

RFID OPTIONS

- UHF: ISO 18000-63, EPC Class 1 Gen2
- 865 – 868 MHz (EU); 902 – 928 MHz (US)

PRODUCT DESCRIPTION

The Bit Beta Tag from iDTRONIC is designed for small asset trackings such as small hand tools, surgical instruments, weapons, mould and on metal applications.

The integrated RFID UHF reader supports ISO 18000-63, EPC Class 1 Gen2 in the frequency areas 865 – 868 MHz (EU); 902 – 928 MHz (US). It achieves a reading range of up to 2 meters.

Its robust IP68 ceramic housing has a good resistance against salt water, bleach, bleaching solutions, formic acid, gasoline, oil, shocks and falls from a height of up to 1.2 meters.

Optionally we offer a self-adhesive sticker on the bottom. We can encode your RFID tags using Standard, NDEF or Crypto-Coding.

APPLICATION EXAMPLE



TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

Operating Frequency	UHF: 865 – 868 MHz (EU) 902 – 928 MHz (US)
RF Protocol	ISO 18000-63, EPC Class 1 Gen2
Chip Type	Alien Higgs-3
Memory Configuration	96-EPC Bits extensible to 480 Bits 512 User Bits 64 Bit Unique TID
Reading Range	Up to 2 Meters*
Polarization	Linear

MECHANICAL SPECIFICATIONS

Dimensions	∅ 5.5 × 2.6 mm ±0.2
Weight	0.29 g
Housing Material	Ceramic
Housing Colour	Painted Black
Mounting Options	<u>Adhesive Fixing</u> <ul style="list-style-type: none">• VHB Tape• Silicone sealants• Epoxy <u>Others</u> <ul style="list-style-type: none">• Moulding embedded• Heat-shrinkable tubing

*READING DISTANCE DEPENDS ON ANTENNA AND ENVIRONMENTAL CONDITIONS.

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	- 40 °C to + 85 °C
Survivability Temperature	- 50 °C to + 200 °C
Protection Class	IP 68 (20 °C, 2 m, 48 h)
Humidity	5% to 95% non-condensing
Shock & Vibration	MIL STD 810-G
Drop Specifications	Multiple drops to concrete: 1.2 m across the operating temperature range
Withstands exposure to	Salt water, Bleach, Cleaning solutions, Formic acid, Gaso- line, Oil

APPLICABLE STANDARDS

RoHS 2	EC Guideline 2011/65/EU and amendment 2015/863/EU, updated by 2017/2102/EU EN 50581:2012 (valid till 2024-07-07) EN 63000:2018
REACH	EU Guideline 1907/2006, updated by 2020/171/EU
Certificates	CE, FCC
ATEX	Optional

AVAILABLE ICS

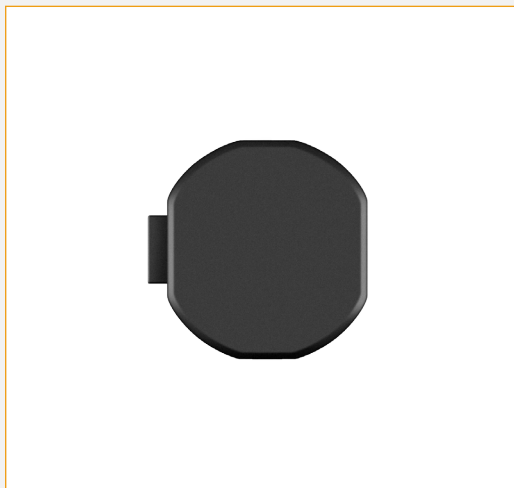
UHF: 865 – 868 MHz (EU) | 902 – 928 MHz (US)

IC TYPE	MEMORY	MODE
Higgs® 3	512 bits	EPC Global Gen2 ISO/IEC 18000-63

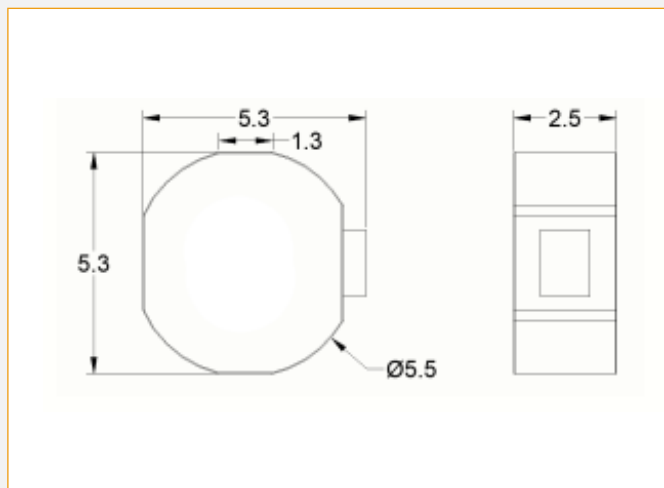
PERSONALIZATION OPTIONS

- Self-Adhesive Sticker
- Encoding (Standard / NDEF / Crypto Encoding)

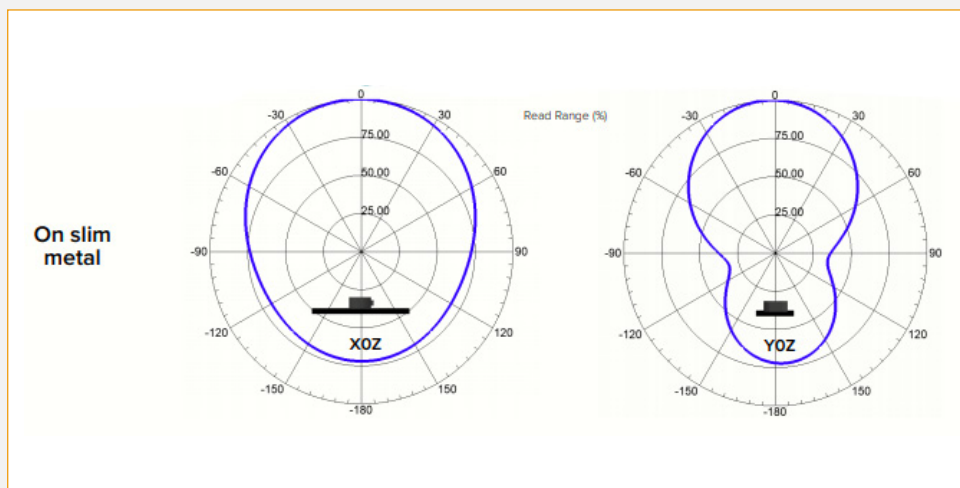
PRODUCT PICTURES



MECHANICAL VIEW



RADIATION PATTERN



ORDER CODES

VERSIONS	ORDER CODES
Bit Beta EU: 865 – 868 MHz	HCT-C0400-EU
Bit Beta US: 902 – 928 MHz	HCT-C0400-US

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