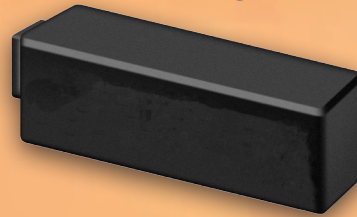
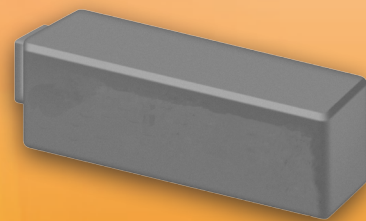


STANDARD



AUTOCLAVABLE



SPECIAL RFID TAG BIT GAMMA TAG

APPLICATIONS

- Small Hand Tools Tracking
- Medical Tool and Parts Tracking
- Surgical Instruments Tracking
- Small Parts Source Tracking
- On Metal Asset Tracking

FEATURES

- Infinitesimally Tiny Size
- Up to 1.5 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 Gamma Tag from iDTRONIC is designed for minimal asset trackings such as small hand tools, surgical instruments and on metal applications. The ability to be used for minimal metal applications has opened many doors for source tagging opportunities.

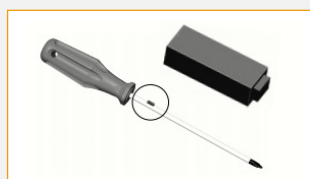
The Bit Gamma Autoclavable Tag Version is specially designed for medical instruments tracking such as surgical instruments, dental instruments and small trays. It is extremely reliable and durable for harsh applications and meets autoclave requirements for use in the healthcare industry.

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 1.5 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 1.5 meters.

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

APPLICATION EXAMPLES



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 Types	Standard: Alien Higgs-3 Autoclavable: Impinj Monza R6
Memory Configuration	96-EPC Bits extensible to 480 Bits 512 User Bits 64 Bit Unique TID
Reading Range	Up to 1.5 Meters*
Polarization	Linear

MECHANICAL SPECIFICATIONS

Dimensions	7.5 × 2.5 × 2.0 mm ±0.2
Weights	Standard: 0.18 g Autoclavable: 0.17 g
Housing Material	Ceramic
Housing Colours	Standard: Painted Black Autoclavable: Paintey Gray
Mounting Options	<p>Standard Version: <u>Adhesive Fixing</u></p> <ul style="list-style-type: none"> VHB Tape Silicone sealants Epoxy <p><u>Others</u></p> <ul style="list-style-type: none"> Moulding embedded Heat-shrinkable tubing <p>Autoclavable Version:</p> <ul style="list-style-type: none"> Medical autoclavable Epoxy Welding with Epoxy Moulding embedded

*READING DISTANCE DEPENDS ON ANTENNA AND ENVIRONMENTAL CONDITIONS.

AVAILABLE ICS

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

IC TYPE	MEMORY	MODE
Alien Higgs® 3	512 bits	EPC Global Gen2 ISO/IEC 18000-63
Impinj Monza R6	512 bits	EPC Global Gen2 ISO/IEC 18000-63

PERSONALIZATION OPTIONS

- Self-Adhesive Sticker (only for Standard Version)
- Encoding (Standard / NDEF / Crypto Encoding)

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, Gasoline, 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 for Standard Version
FDA	Optional for Autoclavable

CLEANING AND STERILIZATION PROCESS SPECIFICATIONS (AUTOCLAVABLE VERSION)

Ultrasonic Cleaner	30 kHz for 30 min 1.000 Cycles
Disinfection by Light	C wave ultraviolet and wave-length range is from 200 nm to 275 nm
Enzyme Washing	90 °C with pressure 90 PSI for 50 min 1.000 cycles
Autoclave Sterilization	134 °C with 8 min 1.000 Cycles
Gamma Sterilization	Limited
ETO Sterilization	Compliant
Heat Sterilization	180 °C 2H 1.000 Cycles

PRODUCT PICTURES

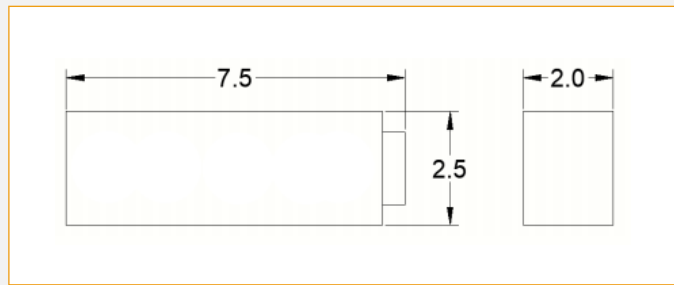
STANDARD



AUTOCLAVABLE

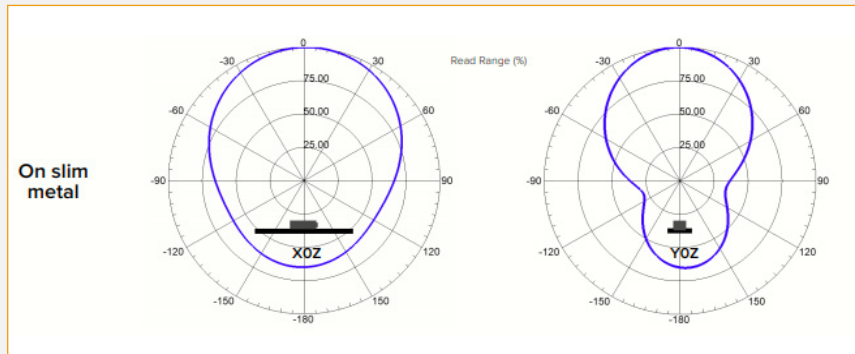


MECHANICAL VIEW

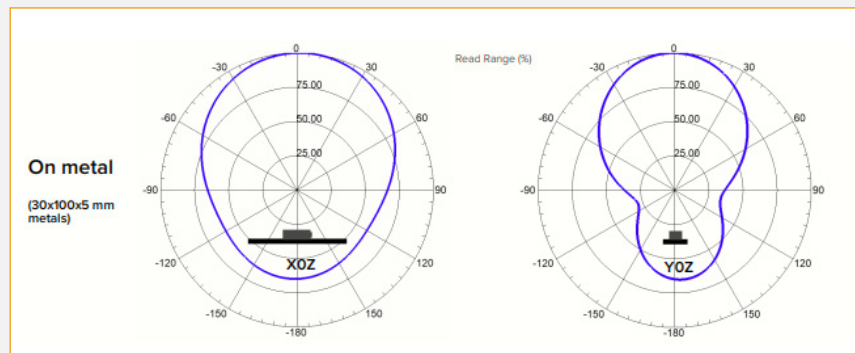


RADIATION PATTERN

STANDARD VERSION



AUTOCLAVABLE VERSION



ORDER CODES

VERSIONS	ORDER CODES
STANDARD VERSION	
Bit Gamma EU: 865 – 868 MHz	HCT-C0500-EU
Bit Gamma US: 902 – 928 MHz	HCT-C0500-US
AUTOCLAVABLE VERSION	
Bit Gamma Autoclavable EU: 865 – 868 MHz	HCT-C0503-EU
Bit Gamma Autoclavable US: 902 – 928 MHz	HCT-C0503-US

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