

## SPECIAL RFID TAG APOLLO TAG

### APPLICATIONS

- Industrial Applications
- Asset Tracking
- Container Tracking
- Paintshop Processes
- Automotive Manufacturing

### FEATURES

- Robust Ceramic Housing with Engineering Polymer
- Up to 12 Meters Reading Range
- Mechanical or Adhesive Mounting
- IP68 Protection Class (IP69K: Paintshop)

### RFID OPTIONS

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

### PRODUCT DESCRIPTION

The Apollo Tag from iDTRONIC is designed for the industrial markets where critical and potentially hazardous situations require reliable identification of assets or containers. The Apollo Paintshop Version is especially designed for the automotive spraying line application.

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 high reading range of up to 12 meters.

Its robust IP68 ceramic housing with engineering polymer has a good resistance against harsh elements such as high impact and caustic chemicals, shocks and falls from a height of up to 1.2 meters.

Optionally we offer a laser engraving or printing with your name or logo. We can encode your RFID tags using Standard, NDEF or Crypto-Coding.

## 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 12 Meters*
Polarization	Linear

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	- 40 °C to + 85 °C
Survivability Temperature	- 50 °C to + 260 °C
Protection Class	IP 68 (20 °C, 2 m, 24 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

### MECHANICAL SPECIFICATIONS

Dimensions	58.3 × 42.3 × 9.5 mm ±0.5
Weight	41.5 g
Housing Material	Ceramic with High-performance Engineering polymer
Housing Colour	Black
Mounting Options	<ul style="list-style-type: none"> <li>• Screws (M4.5)</li> <li>• Rivet hole ø 0.19 in (ø 5 mm)</li> <li>• Adhesive fixings</li> <li>• VHB Tape</li> <li>• Silicone sealants</li> <li>• Epoxy</li> </ul>

### CHEMICAL RESISTANCE

Salt water (15% salinity) exposure	168 hours
Sodium Hydroxide (10% pH 14) exposure	168 hours
Sulfuric acid (10%, pH 2) exposure	168 hours
Engine oil exposure	168 hours
Isopropyl exposure	48 hours
Alcohol Industrial cleaner exposure	48 hours
Epoxy resin coolant exposure	48 hours
Industrial rust lubricant exposure	48 hours
Acetone exposure	48 hours
Gasoline exposure	48 hours
Diesel fuel exposure	48 hours
Soap solution (30%) exposure	48 hours
Carboxylic acids exposure	48 hours

\*READING DISTANCE DEPENDS ON ANTENNA AND ENVIRONMENTAL CONDITIONS.

## 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

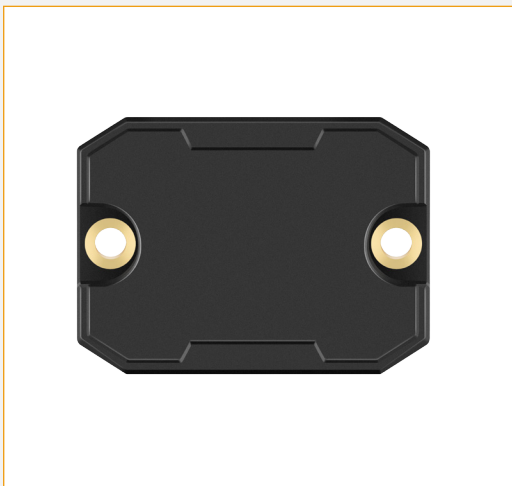
### PERSONALIZATION OPTIONS

- Laser Engraving
- Printing
- Encoding (Standard / NDEF / Crypto Encoding)

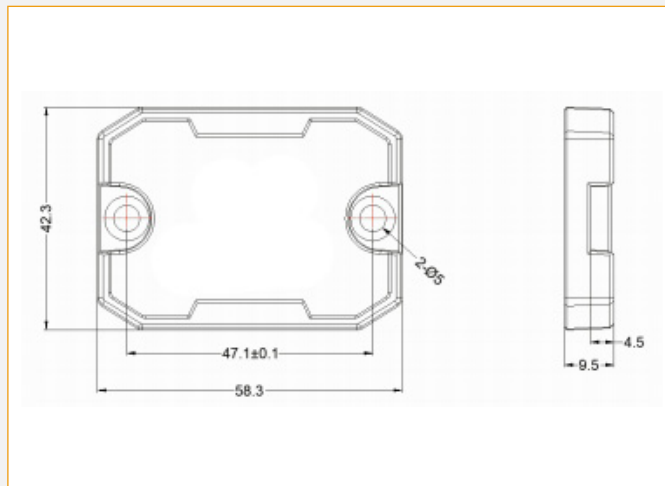
### APPLICABLE STANDARDS

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

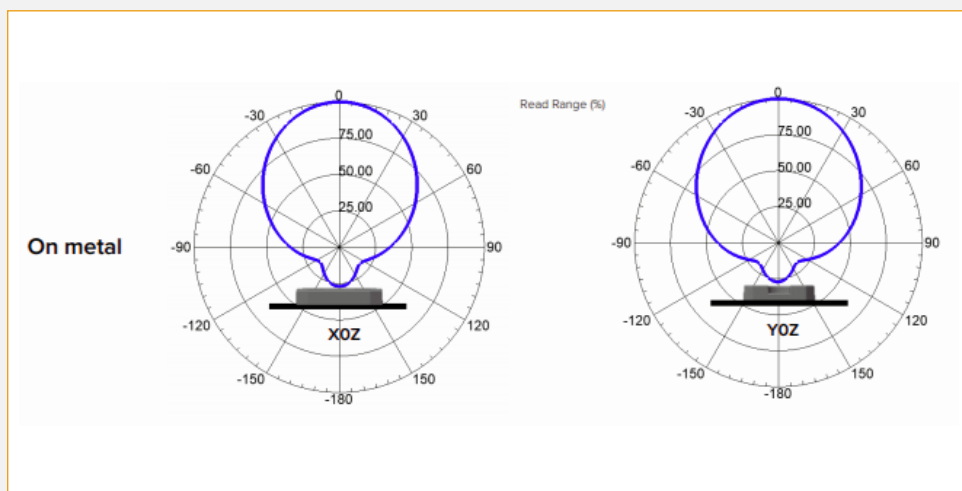
## PRODUCT PICTURES



## MECHANICAL VIEW



## RADIATION PATTERN



## ORDER CODES

VERSIONS	ORDER CODES
<b>Apollo Tag – Standard Version</b>	
EU: 865 – 868 MHz	HCT-C0110-EU
US: 902 – 928 MHz	HCT-C0110-US
<b>Apollo Tag – Paintshop Version</b>	
EU: 865 – 868 MHz	HCT-C0112-EU
US: 902 – 928 MHz	HCT-C0112-US

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