



HEAVY DUTY RFID TAG

SLING TAG

APPLICATIONS

- High Value Metal Applications
- Aerospace Applications
- Military Applications
- Chemical Areas

FEATURES

- Passive RFID UHF Tag | Optional: HF
- Up to 2 m Reading Range
- HVP Rubber + Black nylon-coated stainless steel rope, Aluminum ferrule for crimp-type retention
- IP69K Protection Class
- ATEX Compliant

RFID OPTIONS

- UHF: EPC Global Class1Gen2
ISO/IEC 18000-6C
- HF: EPC Global Class1Gen2
ISO/IEC 18000-6B
- ISO 17665
- ISO 11135

PRODUCT DESCRIPTION

The Sling Tag from iDTRONIC provides automatic identification and tracking capabilities in a wire rope. It was designed for rugged or hazardous use-areas. It is compliant to the EU directives on explosion protection with ATEX. It covers equipment and protective systems intended for use in explosion-hazard atmospheres.

The Tag consists of HVP rubber and is particularly resistant against most acids, solvents and bases. It was designed for temperatures from - 50 °C up to + 180 °C. Thanks to the IP69K Protection Class it has an excellent resistance against UV and continuous sea water immersion.

The RFID Tag works in UHF Frequencies of EU: 865 – 869 MHz and US: 902 – 928 MHz and has a reading range of up to 2 meters. The supported Standards are EPC Global Class1 Gen2; ISO 18000-6C, ISO 17665 and ISO 11135. Optionally, the tag is available in HF: 13.56 MHz. It is also US Patented # 7,928,922.

The Sling Tag is designed to be mounted to any metallic surface by simply looping the plastic-covered stainless steel wire rope over or through an object and then crimping the aluminium ferrule to securely fasten the tag.

TECHNICAL DATA

* *READING DISTANCE DEPENDS ON TAG TYPE AND ORIENTATION.*

ELECTRICAL SPECIFICATIONS	
Operating Frequencies	UHF (EU: 865 – 869 MHz US: 902 – 928 MHz) Optional: HF (13.56 MHz)
Interface Protocol	UHF: EPC Global Class1Gen2 ISO/IEC 18000-6C HF: EPC Global Class1Gen2 ISO/IEC 18000-6B
Operating Mode	Passive
Reading Range	UHF: Real-world: 1 – 2 meters* Lab environment: 7 meters*
IC Types (UHF)	<u>Standard:</u> Alien Higgs 3™ (128 Bytes) <u>Optional:</u> EM, Fujitsu, Impinj, NXP (Up to 240 Bytes)
Memory Content	Unique 96-bit number encoded
Extended Memory	512 Bytes
TID	Factory-programmed, non-changeable, unique 64-bit ID

ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature	- 50 °C to + 180 °C
Temperature Cycling Test	- 25 °C to + 85 °C continuous for 7 days
Protection Class	IP 69K
Weather Resistance	Excellent, incl. UV-resistance and continuous sea water immersion
Drop Specifications	2 meters with 5 KG attached @ 100+ times (competition fails at 20) 2 meters with 8 KG attached @ 5+ times (competition fails immediately)
Chemical Resistance	<u>No physical or performance changes in:</u> - Salt water - NaOH - Sulfuric acid - Motor oil <u>Generally good against:</u> - Most solvents - Most acids and bases

MECHANICAL SPECIFICATIONS	
Dimensions	Overall Length: 358 mm Tag: 130 × 20 mm Ferrel: \varnothing 16 mm Wire Rope: \varnothing 4 mm Inside: \varnothing 80 mm
Weight	75 g
Housing Material	HVP Rubber (2.500 psi minimum) Elongation: 400 % minimum Durometer: Share A 60-70
Housing Colour	Black Ferrel: Silver
Cable Specifications	Black nylon-coated stainless steel rope Aluminum ferrel for crimp-type retention
Applicable Surfaces	Metal pipes, metal returnable containers, metal canisters, metal pallets, high value metal items, aerospace applications, military applications, vavles, hoist, chaines, slings
Mounting Option	Looping the plastic covered stainless steel wire rope over or through an object and then crimping the aluminium ferrel to securely fasten the tag

APPLICABLE STANDARDS	
ISO 18000-6C	E.g.: Alien Higgs 2/3/4, Fujitsu Impinj Monza, NXP UCODE, etc.
ISO 17665	Sterilization of Health Care Products – Moist Steam
ISO 11135	Sterilization of Health Care Products – Ethylene Oxide
RoHS 2	2011/65/EU
US Patent Number	7,928,922
ATEX Compliant	

PERSONALIZATION OPTIONS	
<ul style="list-style-type: none"> • Tag Pre-Encoding 	

APPLICATION EXAMPLES

CHEMICAL AREAS



The Sling Wrap Tag of iDTRONIC is especially suitable for harsh environments at chemical areas with high temperatures.

The robust housing of the Tag is very resistant to chemicals like salt water, NaOH, sulfuric acid, motor oil and most solvents, acids and bases.

It can be securely looping around any pipe or (round) metal object with the black nylon-coated stainless steel rope. The aluminum ferrel for crimp-type retention ensure safe and efficient handling.

MILITARY AREAS



The Sling Tag can be used for military purposes within harsh environments under high pressures.

The RFID Tag is particularly resistant to the most common chemicals. The identification of pipes with metallic surfaces can be secured with this Sling Tag.

It can be securely looping around any pipe or (round) metal object with the black nylon-coated stainless steel rope. The aluminum ferrel for crimp-type retention ensure safe and efficient handling.

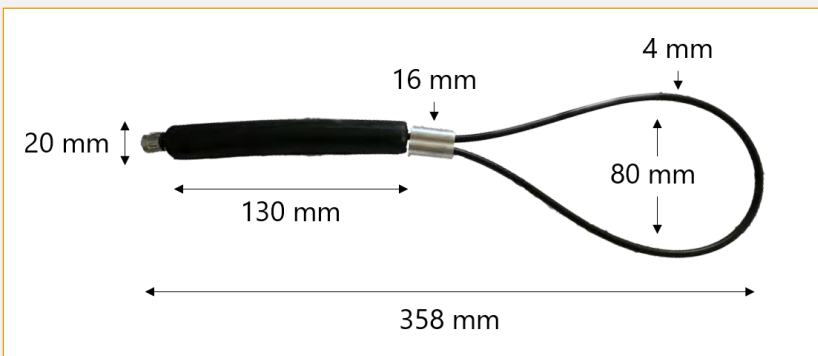
INSTALLATION INSTRUCTIONS

Wrap the stainless steel wire rope around or through the object; push the wire rope into the ferrel on the tag and crimp the ferrel to secure the tag to the object.

The tag is designed to be mounted to any metallic surface by simply looping the plastic covered stainless steel wire rope over or through an object and then crimping the aluminum ferrel to securely fasten the tag.



MECHANICAL VIEW



ORDER CODES

VERSION	ORDER CODE
UHF (865 – 928 MHz)	
Alien Higgs 3™ (128 Bytes)	ST-UHF-TR-PC-101-ALIEN
EM (Up to 240 Bytes)	ST-UHF-TR-PC-101-EM
Fujitsu (Up to 240 Bytes)	ST-UHF-TR-PC-101-FU
Impinj (Up to 240 Bytes)	ST-UHF-TR-PC-101-IM
NXP (Up to 240 Bytes)	ST-UHF-TR-PC-101-NXP
Extended Memory: 512 Bytes	ST-UHF-TR-PC-101-EXM
HF (13.56 MHz)	ST-HF-TR-PC-101

iDTRONIC GmbH
 Donnersbergweg 1
 67059 Ludwigshafen
 GERMANY

Phone +49 (0) 621 66 90 09 4-0
 Fax +49 (0) 621 66 90 09 4-9
 E-Mail: info@idtronic-rfid.com
 Web: idtronic-rfid.com

For further information & prices, please contact info@idtronic-rfid.com

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