



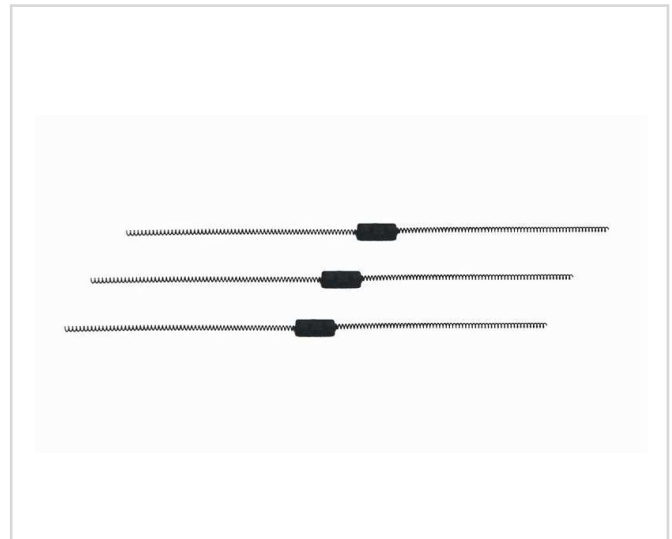
Manufacturer of RFID tags

# DATASHEET

## UHF Spring Tire Tag

Tag Code: U5522911

Spring Tire Tag is UHF Gen2 passive tag. It is intended for embedding into the tire mould prior to the manufacturing and curing process of the tire. This tag is ideal for tire identification and tracking.



### Electrical Specification

Air Interface Protocol	ISO/IEC 18000-6C, EPC Global C1G2
Operational Frequency	865 – 868 MHz or 902 – 928 MHz
Chip**	Alien Higgs-3
Memory Configuration	EPC–96 bits, extendible to 480bits
	TID – 96 bits unalterable unique
	User memory – 512 bits
	Access password – 32 bits
	Kill password – 32 bits
Data Retention	50 Years
Write endurance	100,000 cycles
Read Range*	2 - 4 m (After embedding in tire)
	It is strictly recommended to test with tire only

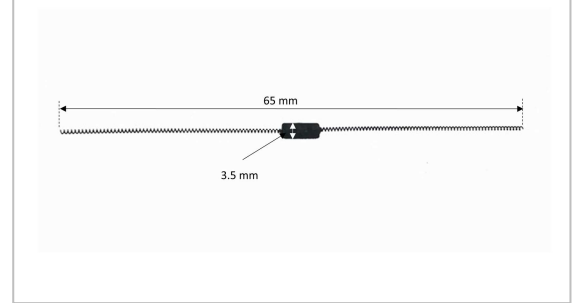
### Physical / Mechanical Specification

Length**	65 ± 0.2 mm
Width (Chip pad)	3.5 mm
Wire Diameter	0.2mm
Spring Diameter	1.2mm
Weight	0.2g
Quality Assurance	100% reader tested

## Environmental Resistance

Operating temperature	-40°C to +85°C
Storage temperature	-40°C to +95°C
Moulding pressure	Up to 5000 kPa
Ingress protection rating	IP68 (after embedding in tire)
Attachment***	Self-Adhesive
Applicable surface	Inside tire

## Dimensions



## Chemical Resistance

Resistant to continuous exposure to salt water for 2 hours

Resistant to continuous exposure to motor oil for 2 hours

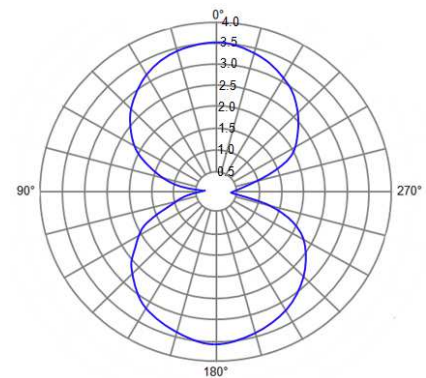
Additionally, abrasion resistant against HCL and IPA

## Additional Services

Pre-encoding	On request
Customization***	Logo / text printing on request

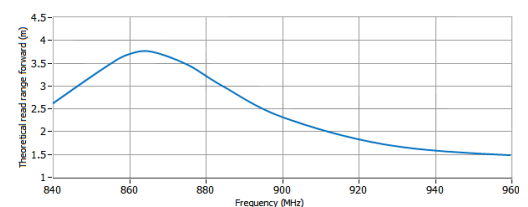
## Radiation Pattern Graph

(Orientation v/s Read Range)



## Linear Frequency Graph

(Frequency v/s Read Range)



\* Actual Read range may vary depending upon the reader and environmental factor

\*\* Other on request

\*\*\* Available as an option at extra cost

## Order Information

Part No.	Description
U5522911-EU	With Alien higgs-3 chip tuned at ETSI frequency
U5522911-US	With Alien higgs-3 chip tuned at US frequency
U5522928-EU	With Impinj Monza 4QT chip tuned at ETSI frequency
U5522928-US	With Impinj Monza 4QT chip tuned at US frequency

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