

Sensor Tadpole

Overview

Frequency Band

UHF 860 - 960 MHz

Chip

Axzon Magnus S2

Antenna Dimensions

18 x 81.15 mm / 0.71 x 3.19 in

International Standard

ISO 18000-6C, EPC Class 1 Gen 2

Industry Segments

Automotive
Industrial Applications

Applications

Moisture Sensing
On-Metal Asset Tracking
Metal and Liquids

RoHs

EU Directive 2011/65/EU and
2015/863 Compliant

REACH

Regulation (EC) No 1907/2006



Water leakage tag

Smartrac has complemented its passive sensor inlay and tag offering with a new, state-of-the-art sensor inlay for a broad range of industry applications. It is designed to measure moisture condition changes within parts and components, to detect any water ingress into the objects during final quality control checks.

The Sensor Tadpole is a passive UHF inlay equipped with Axzon Magnus®S2 Integrated Circuit (IC).

The customized antenna design acts as a resistor / inductor / capacitor (RLC) tuned circuit to enable an antenna to sense its environment. The tag's antenna converts environmental data into an impedance change, and then the sensor tag IC translates this into a sensor code, as it dynamically matches antenna impedance to die impedance.

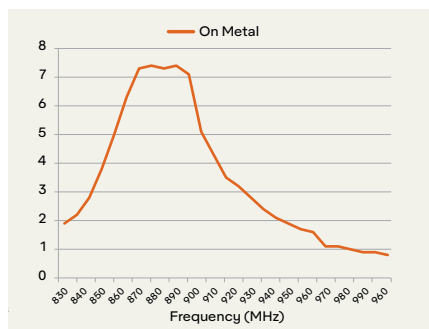
Optionally, the antenna can be extended with a paper tail to recognize small water quantities from a wider area where RF signals cannot easily penetrate. The paper tail absorbs water and transfers moisture level information via capillary action to the tag.

This advanced Sensor Tadpole is a small and thin UHF tag that offers cost efficiency, is easy to implement, and works on difficult surfaces, like metal parts in different industries. Delivery format is as a singulated wet inlay with the option of two different tail lengths. It can be delivered with TID list and sensor code values for increased accuracy and complementary data analysis.

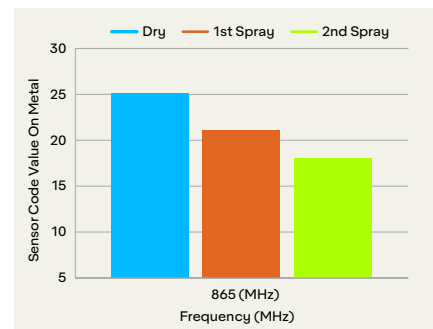
Technical features

Chip	Axzon Magnus S2		
EPC and User Memory	128-bit and 144-bit		
TID Memory	Available for all		
Product Code	3005547	3005549	3005550
Delivery Format	Wet inlay		
Die-cut Dimension	21.5 x 84 mm / 0.85 x 3.31 in		
Inlay Substrate	PET		
Face Sheet	White PET		
Core Size	76 mm / 3 in		
Quantity / Reel	500 pcs/box		
Operating Temperature	-40 °C to 85 °C -40 °F to 185 °F		

Read range



Sensor code value



All graphs are indicative: performance in real life applications may vary.

Contact information

rfid.averydennison.com/contact

North America: +1-866-903-7343 (toll free US)

International: +1-678-617-2359



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Warranty: Please refer to Avery Dennison Intelligent Labels standard terms and conditions: rfid.averydennison.com/termsandconditions

Care and handling: RFID inlays are sensitive to ESD. Observe standard industry practices relating to electronics / RFID to keep environmental impact and static charge to a minimum.

Applications: This product should be tested by the customer / user thoroughly under end use conditions to ensure the product meets the particular requirements. Avery Dennison does not represent that this product is fit for any particular purpose or use. Avery Dennison reserves the right to modify, change, supplement or discontinue product offerings at any time without notice. The information contained herein is believed to be reliable but Avery Dennison makes no representation concerning the accuracy or correctness of the data.



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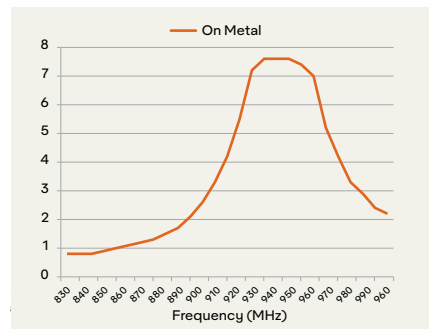
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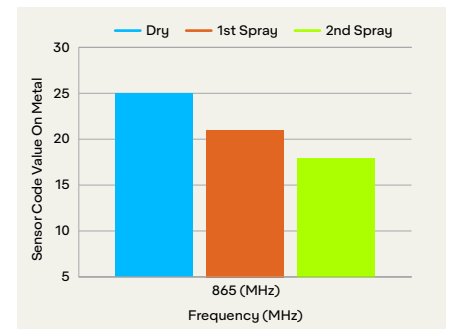
Technical features

Chip	Axzon Magnus S2	
EPC and User Memory	128-bit and 144-bit	
TID Memory	Available for all	
Product Code	3005552	3005553
Delivery Format	Wet inlay	
Die-cut Dimension	21.5 x 84 mm / 0.85 x 3.31 in	
Inlay Substrate	PET	
Face Sheet	White PET	
Core Size	76 mm / 3 in	
Quantity / Reel	500 pcs/box	
Operating Temperature	-40 °C to 85 °C -40 °F to 185 °F	

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