SMART RFID LABELS

Roadstar 8538-OUT

This tag has been developed to track finished tyres, with an unique identification number to prevent tyre theft and cloning. The construction of the tag and the materials used makes the tag durable enough to last the lifetime of a tyre. Roadstar 8538-OUT has to be attached outside the sidewall of the tyre with a vulcanizing agent, mainly used for bus tyres, truck tyres, trailer tyres, etc.

TYPICAL APPLICATIONS

- Bus tyre tracking
- Truck tyre tracking
- Automobile factory tyre tracking
- Logistic vehicle management

PHYSICAL SPECIFICATION

Face Stock	Rubber
Tag Size	85 x 38 x 2 mm / 3.34 x 1.49 x 0.07 in
Adhesive (not provided)	Vulcanizing agent (same as the one used to stick tyre repair patches, ex. Tech 760)
Weight	4.7 gms
Delivery Format	Single pieces
No. of Tags/ Box	120 pcs

RF SPECIFICATION

Mode of Operation	Passive
Device type	Class 1 Gen 2 Passive UHF RFID transponder
Air interface protocol	EPC Global Class1 Gen2 ISO 18000-6C
Operational frequency	Global 860-960 MHz
IC type*	Alien Higgs 3
Memory configuration	EPC Size 96 Bits, User Memory 512 Bits, 96 bits TID with 64 bits Unique serial number
Write Cycle Endurance	100,000
Data Retention	Upto 10 years
Read range (2WERP)**	0.9m
Applicable surface materials	Rubber

ENVIRONMENTAL RESISTANCE

Operating Temperature	-40°C to +85°C / -40°F to +185°F
Adhesive Service Temperature	-40°C to +85°C / -40°F to +185°F
Recommended Application Temperature	+10°C to +38°C / 50°F to +100.4°F
Ideal Storage Condition	-40°C to +230°C / -40°F to +446°F
Expected Lifetime	Years in normal operating conditions

PRODUCT INSTALLATION

- Refer pages 4-6 for detailed product installation procedure

PERSONALIZATION OPTIONS

Pre-encoding

- Customer specific encoding of EPC

Customized Printing

- Customer specific designing

ORDER INFORMATION

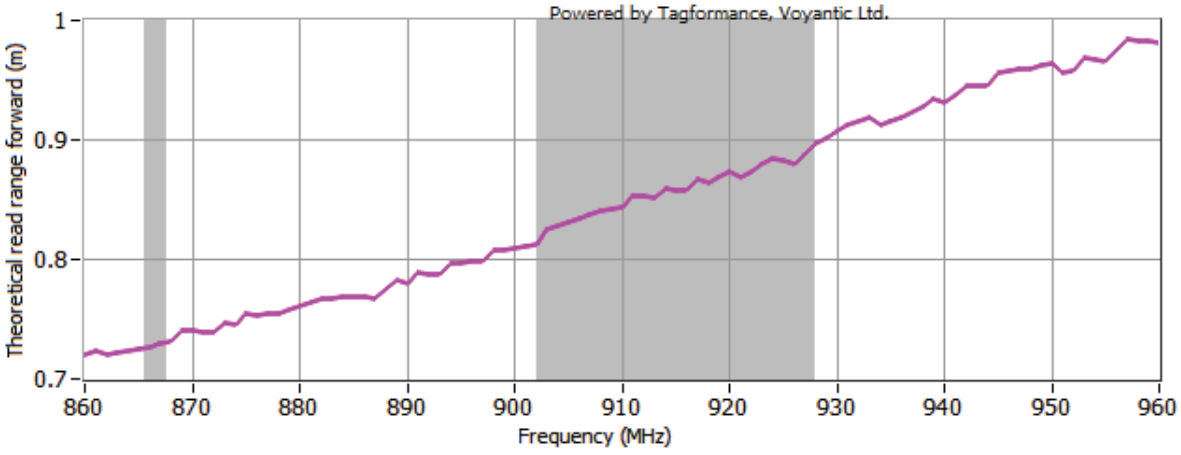
Part Number

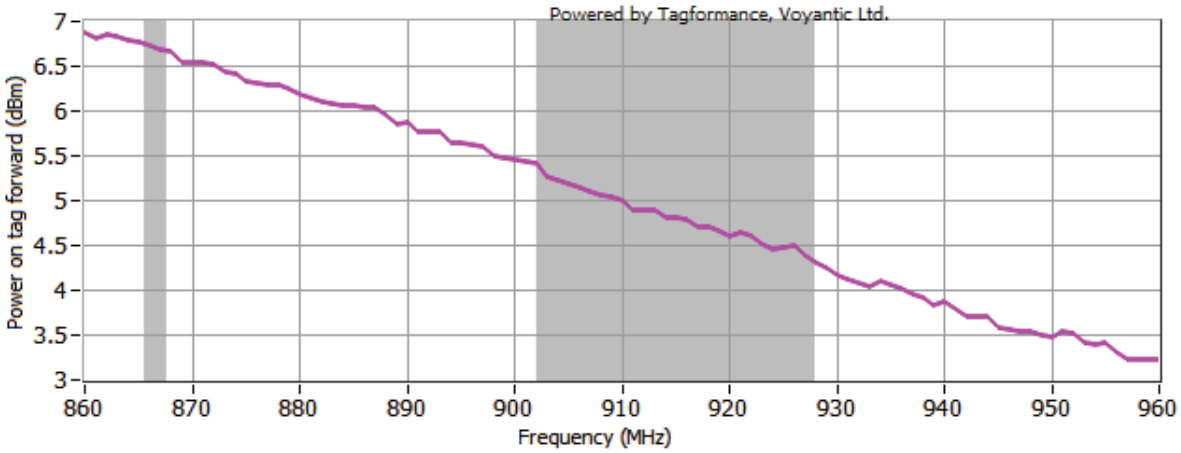
- RF.ST.Rdstr.8538.H3

Packaging

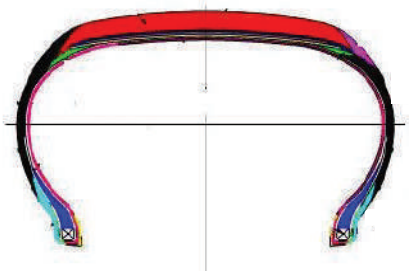
- 120 pcs/ box

READ RANGE GRAPHS





INSTALLATION GUIDE



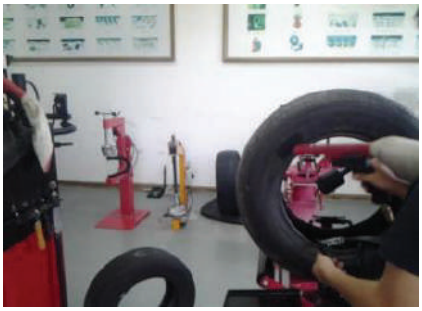
1. Confirming the area for the tag and selecting a smooth place.

2. Spraying rubber cleaner on the area selected according to the size of the tyre tag, and using a clean towel to clean the dust twice before the cleaner gets dry.

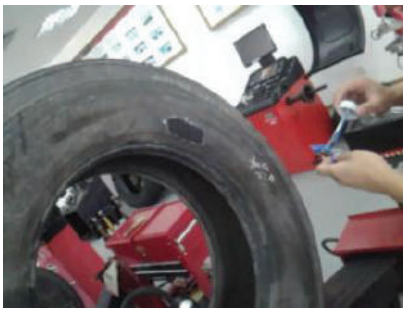
3. Marking out on the selected area according to the size of the tyre tag, making sure that the scribing edge must leave the edge of the tyre tag over 10mm. In addition, the direction of the tag length must be in parallel with the tyre circumference.

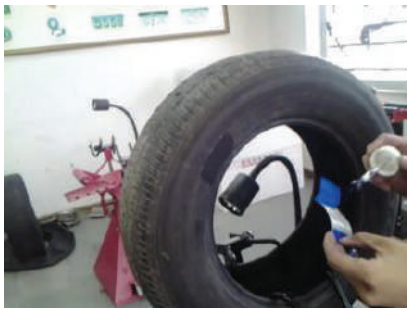
4. Polishing the lateral surface of the tyre by using a low-speed grinding machine.

5. Using a wire brush to clean, then dealing the debris by using a vacuum cleaner



6. Stripping the blue film from the back of the tag, daubing exclusive chemical vulcanization agent, you should daub from the center to the outer edge thinly and evenly, dry it after 3--5 minutes (appropriate adjustment according to the local temperature situation)



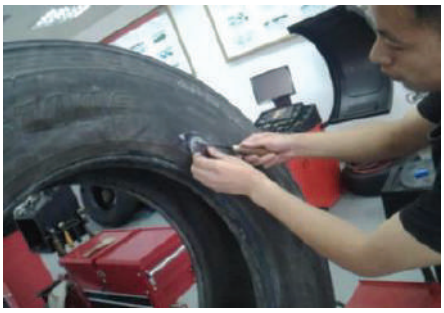


7. Daubing exclusive chemical vulcanization agent on the area that has been polished, you should daub from the center to the outer edge thinly and evenly, dry it after 3--5 minutes (appropriate adjustment according to the local temperature situation)

8. Roll up the blue film from the center, stick the patch to the area that was polished, then do compaction by using a roller from the center to the outer edge step by step

9. Completely remove the blue thin film, then do compaction from the center to the edge of the patch

10. Remove the white film from the surface of the tag.



11. The tag is ready to be used now.

* Other IC's available on request
** The indicated read range values are measured in our laboratory testing environment, where antennas with optimum directivity are used with maximum allowed operating power. Different surface materials and environments may exhibit different results.

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