

RFID UHF Tire Label

100 x 50 mm U9



The 100 x 50 mm NXP UCODE® 9 RFID UHF Tire Label is a high-performance RFID label for tire tracking and management. Built with NXP UCODE® 9 chip, this UHF RFID label provides enhanced read range, fast encoding speeds, and excellent reliability in challenging environments.

This RFID tire label is engineered to withstand pressure and exposure to rubber products, making it an ideal solution for tire manufacturing, inventory management, and life-cycle tracking. The 100*50 mm size balances readability and discreet integration into the tire structure. It is designed for embedding or surface application on rubber materials. It is fully compliant with ISO 18000-6C and EPC Class1 Gen2 standards. Each Label has a unique TID and cannot be changed. It is ideal for tire manufacturers, distributors, and fleet management companies seeking an efficient and automated tracking solution.

Highlights & Benefits

- ✓ Outstanding performance
- ✓ Flexible material to contour to any shape of tire
- ✓ ETSI(865-868 MHz) and FCC(902-928 MHz) optional
- ✓ Customization-design, printing, encoding available

Applications

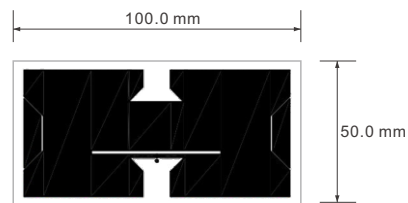
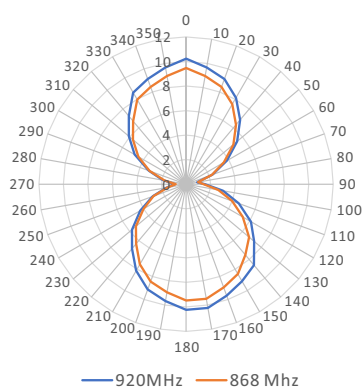
- ✓ Vehicle and truck management
- ✓ Tire anti cloning and brand protection
- ✓ Tire inventory tracking and anti theft



Technical Features

Model	RC5053
RFID Features	
Air Interface Protocol	EPC Class 1 Gen 2 / ISO 18000-63 Type C
Frequency	860-960 MHz
Chip Type	NXP Ucode 9
Memory	User - N/A; EPC - 96 bits; TID - 96 bits
Data Storage	> 10 years
Re-write	100,000 times
Read Range(2W ERP)	FCC: > 10.0 m(32.8 ft) , on rubber ETSI: > 9.5 m(31.2 ft) , on rubber
Physical Features	
Dimension	100 x 50 mm / 3.94 x 1.97 in
Material	Coated paper/PET
Color	White
Operating Temperature	-40°C to 85°C / -40°F to 185°F
Survival Temperature	-40°C to 100°C / -40°F to 212°F
Storage Condition	20±5°C, 50±10% RH, Store away from sunlight
IP Rate	IP68, test for 5 hours at 1m deep water
Other Features	
Installation	Adhesive
Customization	Printing, Encoding, Design, etc.
Package	1,000 pcs / bag, 4 bags / box

Radiation Pattern



PS: The performance is theoretical values in the lab and the actual effect depends on the specific applications.

RICHRFID

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