



Ferro

85 x 21 x 10 mm U9xm

RICHRFID Ferro rugged tags are housed in a tough, rigid, and protective shell—such as industrial plastic—making them suitable for the most aggressive environments, including physical impacts, extreme temperatures, moisture, chemicals, and mechanical stress.

These tags include high-protection anti-metal variants specifically designed for attachment to metal surfaces. An internal anti-metal layer counteracts signal interference from metal, solving the signal attenuation and readability issues common with ordinary tags in metal environments. Combined with high-performance chips and optimized antennas, they achieve longer reading distances and stable performance on metal surfaces.

Diverse types are available based on application needs, including metal-mounted, non-metal, HF (NFC), UHF, and dual-band options. Multiple installation methods are supported, such as glue, self-adhesive, screws, rivets, and zip ties. High protection ratings such as IP68 ensure reliable operation in harsh conditions. With a variety of chip types and operating frequencies covering both UHF and HF, these tags are widely used in metal asset management, metal equipment management, industrial applications, warehousing, logistics, and other fields.

Highlights & Benefits

- ✓ Preeminent performance based on specific applications
- ✓ Robust and durable for harsh environment
- ✓ Reusable & cost-effective Long-term
- ✓ Various type and installation options
- ✓ Customization: design, printing, encoding, etc, available

Applications

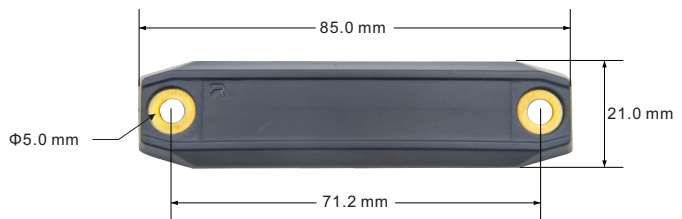
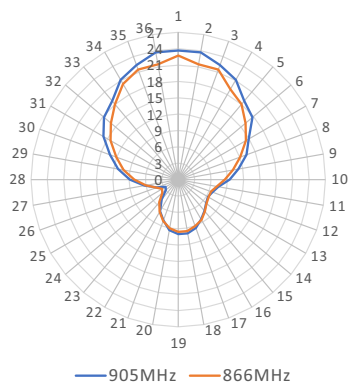
- ✓ Construction & heavy equipment
- ✓ Oil, gas, energy facility
- ✓ Automotive & aerospace fixture
- ✓ Container & storage rack



Technical Features

Model	RCO8019
RFID Features	
Air Interface Protocol	EPC Class 1 Gen 2 / ISO 18000-63 Type C
Frequency	860-960 MHz
Chip Type	NXP Ucode 9xm
Memory	3 Customer Configurable Memory ① User - 752 bits; EPC - 128 bits; TID - 96 bits ② User - 624bits; EPC - 256 bits; TID - 96 bits ③ User - 384 bits; EPC - 496 bits; TID - 96 bits
Data Storage	> 10 years
Re-write	100,000 times
Read Range(2W ERP)	FCC: > 23.6 m(77.4 ft) , on metal ETSI: > 22.7 m(74.5 ft) , on metal
Physical Features	
Dimension	85 x 21 x 10 mm / 3.35 x 0.83 x 0.39 in
Material	Engineering Plastics
Weight	9.8 g
Color	Gray or Customization
Operating Temperature	-40°C to 85°C / -40°F to 185°F
Survival Temperature	-40°C to 120°C / -40°F to 248°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(clean and dry surface), Rivet, Magnet, Screw
Customization	Printing, Encoding, Design, etc.
Package	100 pcs / bag, 10 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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