



RFO RTHT3148 High Temperature & Anti-Corrosion UHF Tag

+300°C

DATA SHEET

Product Description

Main Features

The RFO-RTHT3148 sets a new benchmark for industrial RFID performance.

Engineered for the toughest environments, this chemical-resistant RFID tag is fully encapsulated through advanced injection molding, creating a seamless, gap-free structure. Combined with its high-grade ceramic substrate, the tag delivers outstanding resistance to extreme temperatures, corrosion, and aggressive chemical exposure — ensuring reliable operation where conventional tags fail. These high-temperature tags can all withstand acid and alkali splashes because the outer shell is corrosion-resistant.

With its **long read range**, **ultra-rugged design**, and **exceptional durability**, the RFO-RTHT3148 is built to withstand years of heavy industrial use. Acids, alkalis, high heat, and mechanical stress pose no threat to its integrity or performance. However, if the application involves soaking in acid or alkali, only RFO-RTHT3148 can do it because this Tag is produced by an integrated injection molding process with no gaps on the surface. The acids involved, such as sulfuric acid, hydrochloric acid, and nitric acid, have all been applied.

Product pictures



Article no:	Standard	RFO RTHT3148
Typical Applications		
<ul style="list-style-type: none"> •Manufacturing •Security •Waste management •Logistics 	<ul style="list-style-type: none"> •Health Care •Asset management •Food •Transportation 	<ul style="list-style-type: none"> •Service Maintenance & Diagnostics •Automotive •Retail & POS •Home Automation

Contact:

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Technical Specifications		RFO RTHT3148
Operation mode	Passive (Battery less)	
Protocol	EPC Class 1 Gen2	
ISO Standard	ISO 18000-6C	
Operating Frequency	865-868MHz (EU) 902-928MHz (FCC)	
Memory	EPC: 128 Bit User: 32 Bit TID: 96 Bit	
IC Type	Impinj R6-P	
Polarization	Linear	
Read Range	Up to 14 m (on metal) (depends on environment etc.)	
Environment Compatibility	Optimized on metal	
Mechanical Specifications		
Material	Ceramic	
Surface Materials	PA6+GF	
Dimensions	31.5 x 48.5 x 10.3 mm	
Weight	28 g	
Attachment	High performance epoxy resin / Rivet hole (Φ4.0 mm)	
Color	Black by default	
Environmental Specifications		
Ambient Temperature	-30°C to +300°C	
Operating Temperature	-30°C to +85°C	
Shock and Vibration	MIL STD 810-F	
Certifications	CE & RoHS approved / ATEX/IECEx certified	
IP Classification	IP68	
Warranty	1 Year	
Customization Options		
Encoding		
Pre-encoding based on customers' specification, including EPC, User memory and other requests		
Appearance		
Customized appearance design, including logo, barcode, text on the PET label etc		