

# Alien Higgs® 9 Concrete RFID Tag



## 1. Product Overview

The Alien Higgs® 9 Concrete RFID Tag is a tag with excellent heat resistance, corrosion, impact resistance and other properties, designed specifically for applications where durability and long-range reading capabilities are paramount. Ideal for embedding into concrete structures, it offers an unparalleled solution for concrete and construction industry.

## 2. Product Parameters

### 2.1 Physical Characteristics

SKU	AZP-H9-OMPPS-4732	
Material	PPS	
Tag Size	46.5x31.5 mm (Hole: D3.6 mmx2)	
Tag Thickness	7.5 mm	
Tag Weight	22 g	
Tag Color	Black	
IP Rating	IP68	
Mounting Methods	Embedded in concrete	

### 2.2 Technical Parameters

Operating Frequency	865-868MHz (EU) / 902-928MHz (US)	
Communication Protocol	EPC Class1 Gen2, ISO18000-6C	
Applicable Surface	Embedded in concrete	
Read range on metal (Fix Reader)	6.6m	
Read range on metal (Handheld Reader)	4.6m	
Read range with handheld reader when embedded in concrete	5 cm depth: 2.2m	10 cm depth: 2m



## Key Features

<b>Frequency Band</b> 865-868MHz (EU) / 902-928MHz (US)
<b>Chip</b> Alien Higgs® 9
<b>International Standard</b> EPC Class1 Gen2, ISO18000-6C
<b>User memory</b> 512 Bits
<b>EPC memory</b> 96-480 Bits
<b>IP Rating</b> IP68
<b>Max. Read Range</b> 6.6m on metal, 2.2m embedded in concrete

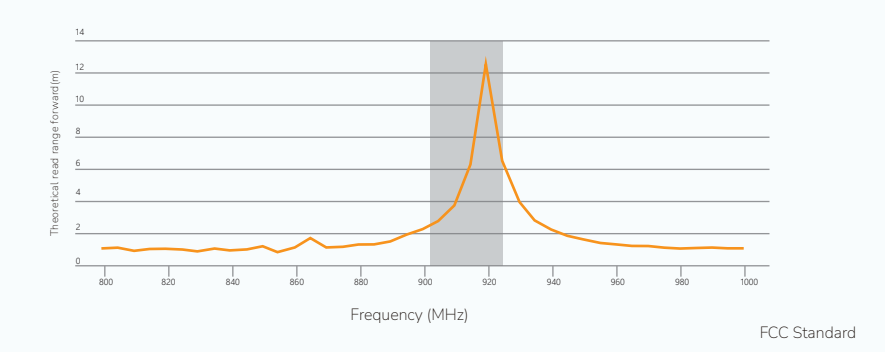
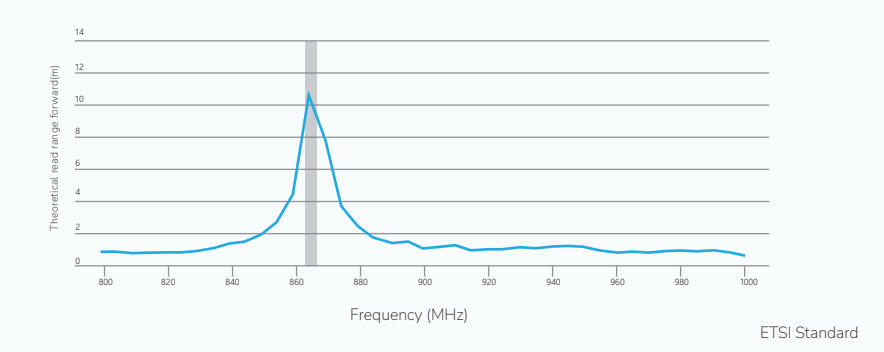
2.3 Chip Characteristics

Chip Manufacturer	Alien
Chip Family	Higgs® 9
Write Cycles [typical cycles]	200 000
Data Retention [years]	50
EPC Memory	96-496 Bits
User Memory	688 Bits
UTID Memory	48 Bits
Read sensitivity	Up to -20 dBm
Write sensitivity	Up to -18 dBm
QuickWrite™ &BlastWrite™	Support
Dynamic Authentication™	Support

2.4 Additional Information

Storage Environment	-40°C to +150°C
Operating Environment	-25°C to +100°C

Reading range under different frequency



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