

iTAG500 Max® - Long Range Intrinsically Safe UHF RFID Tag

A high performance, long-range passive UHF RFID tag which can be deployed in all potentially explosive, harsh, wet, and corrosive environments

T4/T5/T6 -40°C ≤ Ta ≤ +80°C - dependant on RF reader power

Label - ATEX II 2G Ex ia IIB Gb
IECEX 2G Ex ia IIB Gb
IP54

Rugged - ATEX II 1G Ex ia IIA Ga, II 2G Ex ia IIB Ga, 1 M1 Ex ia Ma
IECEX 1G Ex ia IIA Ga, 2G Ex ia IIB Ga, 1 M1 Ex ia Ma
IP68

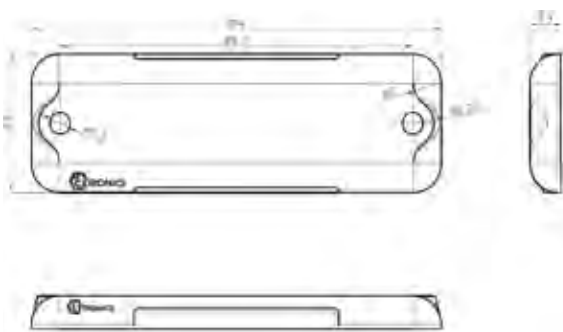
For fixed installation, rugged tags may also be used in Zone 0 IIC environments



Overview

Max tags provide the flexibility of a longer read range while maintaining a smaller tag footprint. Max high performance tags are ideal for stillages, reusable conveyance tracking, returnable transport items. The Max tag is available in a printed label finish with adhesive backing for easy and direct attachment to assets. Alternatively, the Max tag is available in a sturdy rigid encasement with manual attachment or adhesive backing options suitable for use in a moist or harsh environment.

Dimensions for Max Rigid Case



Specification

	Max Label	Max Rigid Case
Read Range (m) – On Metal ¹	Up to 12.0 (US) Up to 8.0 (EU)	Up to 12.0 (US) Up to 10.0 (EU) Up to 7.0 (JPN)
On Metal or Balanced	Balanced	Balanced
Size (mm) (tolerance)	80 x 30 x 3.8 (+/-1.0)	104 x 33 x 8.4 (+/-1.0)
Size (in) (tolerance)	3.15 x 1.18 x 0.15 (+/-0.04)	4.1 x 1.3 x 0.33 (+/-0.04)
Weight (g)	8.4	22.0
Encasement	Synthetic Label	Rigid case - ABS (Opt. Polycarbonate)
Frequency Range (MHz)	902–928 (US) 866–868 (EU)	902–928 (US) 866–868 (EU) 952–954 (JPN)
IC Type	Alien Higgs 3	Alien Higgs 3
User Memory (bits)	512	512
Operating Temperature (°C)	+5 to +40 °C	–20 to +55 °C
IP Rating	IP54	IP68
Shock and Vibration ²	MIL STD 810-F BS EN 60068-2	MIL STD 810-F BS EN 60068-2
Attachment	Film adhesive (std.) Foam adhesive (opt.)	Manual (std.) Film adhesive (opt.) Foam adhesive (opt.)

1. Quoted performance achieved using standard test methodology.
2. Product designed to meet MIL STD 810-F and BS EN 60068-2.