

iTAG500 Flex® - Medium Range Intrinsically Safe UHF RFID Tag



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

T4/T5/T6 $-40^{\circ}\text{C} \leq T_a \leq +80^{\circ}\text{C}$ - dependant on RF reader power

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

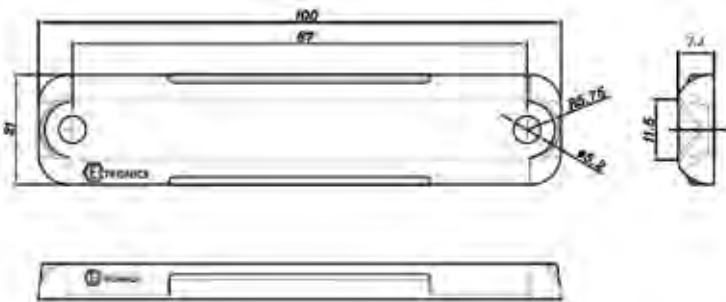
Rugged - ATEX II 1G Ex ia IIB Ga, 1 M1 Ex ia Ma
IECEX 1G Ex ia IIB Ga, 1 M1 Ex ia Ma
IP68

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

Overview

The Extronics iTAG500 Flex is a medium range tag with outstanding performance-to-size ratio. The Flex provides high-performance RFID tag identification in metallic or non-metallic environments with a low profile and a read range of up to 5 metres. The Flex tag's mid-range read distance and compact form factor is convenient for asset tracking and work-in-process applications. Flex tags are ideal for assets with limited surface areas, including: laptops, pallets, carts, tools, construction helmets, manufacturing equipment, returnable transport items. The iTAG500 Flex comes standard with a printed label finish. It is also available in a low-profile ruggedized rigid case for applications with harsh environmental requirements.

Dimensions for Flex Rigid



Specification

	Flex Label	Flex Rigid Case
Read Range (m) ¹	Up to 5.0 (US) Up to 3.5 (EU)	Up to 5.0 (US) Up to 5.0 (EU) Up to 4.0 (JPN)
On Metal or Balanced	Balanced	Balanced
Size (mm) (tolerance)	77 x 15 x 2.8	100 x 21 x 7.2 (+/- 1.0 mm)
Size (in) (tolerance)	3 x 0.6 x 0.11	3.9 x 0.8 x 0.28 (+/- 0.04 in)
Weight (g)	2.9	11.6
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 (chip)	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. Product is RoHS Compliant.