



ROBUST LOW, HIGH AND ULTRAHIGH FREQUENCY RFID TAGS THAT PERFORM IN TOUGH CONDITIONS

- **Durable** – built to withstand the rigors of industrial processing, transportation and outdoor use
- **Versatile** – mounts anywhere without compromising performance: glass, plastic, or wood, with options for on metal mounting
- **Diverse selection** – broad spectrum of available frequencies, memory sizes and diameters with multiple fixation methods

IN Tag™ passive contactless RFID transponders deliver reliable performance in rugged conditions. Each heavy-duty IN Tag disc is highly water, chemical and shock resistant, ATEX certified for use in explosive environments and withstands peak temperatures up to 285° F (140° C).

Low frequency (LF) IN Tag discs perform well affixed to virtually any surface. They offer reliable, cost-effective tagging for near-proximity reader applications, with data storage from a 64-bit user ID, up to 2048-bit read-write capability.

High frequency (HF) discs offer anti-collision technology for faster data processing, larger memory storage, and improved read ranges over LF IN Tag discs. HF IN Tag devices are available in 1 kbit EEPROM and 16 kbit FRAM variants.

Ultrahigh frequency (UHF) IN Tag RFID tags can be read from up to 9.8 ft (3 m). Entire pallets of individual containers, or equipment may be identified item level status can be updated, as articles

roll through distribution and receiving points. They are compliant to EPC Global Class 1 Gen 2 standards and readers.

HID IN Tag RFID tags come in a variety of sizes. For LF and HF applications, tiny 0.79 in (20 mm) discs may be glued or embedded virtually anywhere. If a larger read range is required, HID offers 1.18 in (30 mm) and 1.97 in (50 mm) options, which include pre-drilled holes for screw attachment. UHF tags come in 1.97 in (50 mm) and 2.17 in (55mm) discs.

HF and UHF IN Tag discs are available in on metal (OM) versions, with guaranteed performance when mounted on metal surfaces.

HID IN Tag transponders are an excellent performance-level tag. For lighter-duty applications, consider HID Epoxy Disc or World Tag™ transponders. For applications requiring extreme heat exposure, Volcano Tag™ discs withstand peak temperatures up to 392° F (200° C).

TECHNOLOGY HIGHLIGHTS:

- 1024 bit to 16 kbit read-write memory
- Food compatible
- Low Frequency, 125 kHz
 - Up to 2048 bit read-write memory
 - Disc diameters of 20, 30 or 50 mm
- High frequency, 13.56 MHz
 - 1024 bit to 16 kbit read-write memory
 - Disc diameters of 20, 30 or 50 mm
 - Optional configurations for mounting on metal
- Ultrahigh frequency, 865 to 915 MHz
 - 240 bit EPC, 512 bit read-write memory
 - Disc diameters of 50 or 55 mm
 - Optional configurations for mounting on metal



IN Tag™



HID can create a custom tag solution to fit your application requirements for chip type, dimensions, programming and materials.



SPECIFICATIONS

IN Tag										
Low Frequency										
	200			300			500			
Base Model Number	623182	624182	601182	623183	624183	601183	623185	624185	601185	
ELECTRONIC										
Operating Frequency	125 kHz									
Chip Type	Hitag S		Unique	Hitag S		Unique	Hitag S		Unique	
Memory	256 bit EEPROM	2048 bit EEPROM	64 bit read-only	256 bit EPROM	2048 bit EPROM	64 bit read-only	256 bit EPROM	2048 bit EPROM	64 bit read-only	
Anti-collision	Yes			Yes			Yes			
Reading Distance 2 W reader ERP, free space	Dependent upon reader, environment and application									
PHYSICAL										
Dimensions	Ø 0.79 x 0.10 in (Ø 20 x 2.5 mm)			Ø 1.81 x 0.10 in (Ø 30 x 2.5 mm)			Ø 1.97 x 0.12 in (Ø 50 x 3 mm)			
Mounting Method	Embed, glue			Embed, glue, screw						
Fixation Hole Size	Ø 0.20 in (5.2 mm)									
Affixes To	Glass, plastic, wood									
Housing Material	PPA Polyphthalamide [ISO 1874: PA6T/6I-GF50]									
Color	Black									
Weight	0.04 oz (1.3 g)			0.11 oz (3 g)			0.34 oz (9.5 g)			
CHEMICAL AND MECHANICAL										
Water	IP68, 68° F (20° C), 3.3 ft (1 m) x 24 h									
Withstands Exposure To	Fuel B, mineral oil, petroleum, salt mist, vegetable oil, [UV resistant ISO 4892-2], [food compatible, directive 02/72/EC]									
Environmental Test Conditions	68° F (20° C), 100 h									
Vibration	IEC 68.2.6 [10 g, 10 to 2000 Hz, 3 axis, 2.5 h]									
Shock	IEC 68.2.29 [40 g, 18 ms, 6 axis, 2000 times]									
Drop Test	100 x 3.28 in (1 m)									
Axial / Radial Force	800 N / 500 N, 10 sec.									
THERMAL										
Storage	-40° to +194° F (-40° to +90° C), 1000 h									
Operating	-40° to +185° F (-40° to +85° C)			-13° to +185° F (-25° to +85° C)			-4° to +185° F (-20° to +85° C)			
Shock/Fatigue	-4° to +185° F (-20° to +85° C), 50x5 min with 30 sec transition									
Peak	284° F (140° C), 100 h									
OTHER										
Standards	EN 60079-0:2009; EN 60079-11:2007; EN 60079-26:2007; ISO 15693, ISO 18000-3						EN 60079-0:2009; EN 60079-11:2007; EN 60079-26:2007; ISO 15693			ISO 18000-6C, EPC C1G2; EN 60079-0:2009; EN 60079-11:2007; EN 60079-26:2007
Options	Custom embossed or no logo									
Warranty	7 Years									

INDUSTRY AND LOGISTICS:

- **Asset tracking and logistics**
 - Tool and equipment inventory
 - Maintenance management
- **Automation and manufacturing**
 - Process automation
 - Real-time materials inventory
 - Food processing

■ Returnable transport items

- Inventory and distribution tracking
- Container maintenance

■ Waste management

- Bin tracking
- Recycling compliance monitoring
- Improved invoicing and service accuracy
- Route optimization
- Incentive-based waste and recycling programs

SPECIFICATIONS

IN Tag												
High Frequency												
Ultrahigh Frequency												
500												
	200	200 OM	300	500	500 OM	200	300	500	UHF	UHF OM	UHF	UHF OM
Base Model Number	629182	629182-300	629183	629185	629185-300	634182	634183	634185	692185	692185-300	692186	692186-300
ELECTRONIC												
Operating Frequency	13.56 MHz								865 MHz (EU)		915 MHz (US)	
Chip Type	I-Code SLIX						F-Mem			G2XM		
Memory	1024 bit EEPROM						16 kbit FRAM			240 bit EPC, 64 bit TID, 512 bit user memory		
Anti-collision	Yes											
Reading Distance 2 W reader ERP, free space	Dependent upon reader, environment and application								Up to 9.8 ft (3 m)			
PHYSICAL												
Dimensions	Ø 0.79 x 0.10 in (Ø 20 x 2.5 mm)	Ø 0.79 x 0.19 in (Ø 20 x 4.7 mm)	Ø 1.81 x 0.10 in (Ø 30 x 2.5 mm)	Ø 1.97 x 0.12 in (Ø 50 x 3 mm)	Ø 2.17 x 0.51 in (Ø 55 x 13 mm)	Ø 0.79 x 0.10 in (Ø 20 x 2.5 mm)	Ø 1.81 x 0.10 in (Ø 30 x 2.5 mm)	Ø 1.97 x 0.12 in (Ø 50 x 3 mm)	Ø 1.97 x 0.14 in (Ø 50 x 3.5 mm)	Ø 2.17 x 0.51 in (Ø 55 x 13 mm)	Ø 1.97 x 0.14 in (Ø 50 x 3.5 mm)	Ø 2.17 x 0.51 in (Ø 55 x 13 mm)
Mounting Method	Embed, glue		Embed, glue, screw			Embed, glue		Embed, glue, screw				
Fixation Hole Size			Ø 0.20 in (5.2 mm)					Ø 0.20 in (5.2 mm)		Ø 0.21 in (5.3 mm)		
Affixes To	Glass, plastic, wood	Glass, metal, plastic, wood	Glass, plastic, wood		Glass, metal, plastic, wood	Glass, plastic, wood			Plastic, wood	Metal, plastic, wood	Plastic, wood	Metal, plastic, wood
Housing Material	PPA Polyphthalamide [ISO 1874: PA6T/6I-GF50]											
Color	Black											
Weight	0.04 oz (1.3 g)	0.09 oz (2.5 g)	0.11 oz (3 g)	0.34 oz (9.5 g)	1.06 oz (30 g)	0.11 oz (3 g)	0.34 oz (9.5 g)	0.04 oz (1.3 g)	0.35 oz (10 g)	1.06 oz (30 g)	0.35 oz (10 g)	1.06 oz (30 g)
CHEMICAL AND MECHANICAL												
Water	IP68, 68° F (20° C), 3.3 ft (1 m) x 24 h											
Withstands Exposure To	Fuel B, mineral oil, petroleum, salt mist, vegetable oil, [UV resistant ISO 4892-2], [food compatible, directive 02/72/EC]											
Environmental Test Conditions	68° F (20° C), 100 h											
Vibration	IEC 68.2.6 [10 g, 10 to 2000 Hz, 3 axis, 2.5 h]											
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Operating	-40° to +185° F (-40° to +85° C)					-13° to +185° F (-25° to +85° C)			-4° to +185° F (-20° to +85° C)			
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Options	Custom embossed or no logo											
Warranty	7 Years											



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