sttID®
scemtec Transponder Technology GmbH

Glass Tag

VERSATILE LOW AND HIGH FREQUENCY ASSET TAGS WITH EXCEPTIONAL DURABILITY

☾ **Unsurpassed quality** – fully automated manufacturing and direct-bonding technology ensure tag reliability

☾ **Comprehensive portfolio** – choose from a broad range of standard sizes and integrated chips, or customize to fit any application

☾ **Rugged reliability** – high resistance to chemicals, thermal fluctuation, and immersion into liquid, ATEX Certified
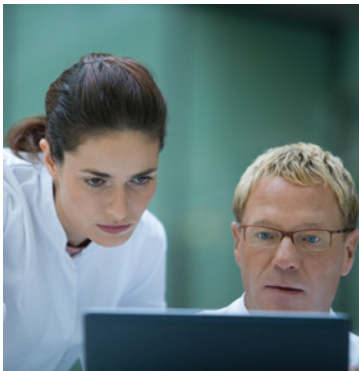
TECHNOLOGY HIGHLIGHTS:

☾ Available anti-collision in LF and HF

☾ Memory storage options: from 64 bit read-only to 2048 bit read-write

☾ Standard lengths from 0.31 in (8 mm) to 0.86 in (22 mm); custom sizes available

☾ Embeddable in a broad spectrum of potential enclosure materials

☾ Unlimited resistance to water and chemical absorption

☾ High stability over fluctuating temperatures

HID Global's Glass Tag passive contactless transponders can be easily inserted or molded into a variety of materials, to enable automated asset identification and management applications using radio frequency identification (RFID).

Manufactured with patented HID Global direct-bonding technology, these tags deliver exceptional size to performance ratios, in both low frequency and high frequency applications.

HID uses fully automated processes to produce glass RFID tags, ensuring consistent quality and reliability. Additionally, automation allows HID to meet growing demand for value and innovation, optimal performance and low unit cost.

The glass enclosure ensures reliable transponder performance, despite potentially harsh conditions in finished tag production and field use.

The inherent properties of glass protect embedded electronics from exposure to harsh chemicals, ensure that tag readability is unaffected by immersion in liquids, and provide excellent stability over fluctuating temperatures.

Glass Tag devices can be embedded into custom housings and mounted on virtually any surface, such as metal, plastic, wood, paper and water, making them ideal for tracking any form of asset, including but not limited to: tools, equipment, pharmaceuticals, production inventory, metallic kegs, gas cylinders or waste containers.

Among the latest HID innovations, Glass Tag Ultra transponders provide greater read-range performance than any low frequency tags of comparable size, and a generous 512 bits of read-write memory.

HF glass tags with patented direct bonding Vigo™ technology are fully ISO 15693 compliant, offering large 1.664 bit of user memory and excellent performance in a small form factor.

In addition, rod-shaped transponder units are also available without glass enclosures, for embedding in custom housings.

Glass Tag

SPECIFICATIONS

	Glass Tag							
	Mini	**Hitag S**				**Nova**	**Titan**	**Q5**
	8 mm	**12 mm**		**13 mm**		**13 mm**	**13 mm**	**12 mm**	**13 mm**
Base Model Number	684294	623201	624201	623203	624203	603200	602203	612201	612203
ELECTRONIC									
Operating Frequency	125 kHz								
Chip Type	EM4305	Hitag S				Nova	Titan	Q5	
Memory	512 bit EEPROM	256 bit EEPROM	2048 bit EEPROM	256 bit EEPROM	2048 bit EEPROM	160 bit EEPROM	1024 bit EEPROM	264 bit EEPROM	64 bit read-only
Anti-collision	Yes								
Reading Distance	Dependent upon reader, environment and application								
PHYSICAL									
Dimensions	Ø 0.05 x 0.31 in (Ø 1.4 x 8 mm)	Ø 0.08 x 0.47 in (Ø 2.12 x 12 mm)		Ø 0.12 x 0.51 in (Ø 3.15 x 13.3 mm)				Ø 0.08 x 0.47 in (Ø 2.12 x 12 mm)	Ø 0.12 x 0.51 in (Ø 3.15 x 13.3 mm)
Tagging Method	External housing								
Housing Material	Bioglass								
CHEMICAL AND MECHANICAL									
Water	IP68, 68° F (20° C), 3.3 ft (1 m) x 24 h								
Withstands Exposure To	Alcohol, ammonium chloride 25%, fuel B, HCL 10%, salt water								
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]								
THERMAL									
Storage	-40° to +194° F (-40° to +90° C), 1000 h								
Operating	-13 °to +185° F (-25° to +85° C)								
Peak	248° F (120° C), 100 h; '284° F (140° C), 10 h								
OTHER									
Standards	EN 60079-0:2009; EN 60079-11:2007; EN 60079-26:2007 (all glass tags)								
Options	Alternative sizes and chips (e.g. EM4200/4102, EM4305, custom programming)								
Box Size	5.000 pcs. for GT Mini 2.000 pcs. for all GT 12mm and 12.5, 22 and 22.5 mm 3.000 pcs. for all GT 9mm 300 pcs. for GT ICode SLIx 629209								
Warranty	2 Years								

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

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SPECIFICATIONS

	Glass Tag										
	Unique			**Ultra**		**FDX-b BDE**		**HDX BDE**	**Vigo**		**I-Code SLIx**
	12 mm	22 mm	13 mm	9 mm	12.5 mm	13 mm	22 mm	22.5 mm	12 mm	13 mm	22 mm
Base Model Number	601201-002	601209	601203	628230	684280	684244	684251	6B7252-001	6B0201	6B0203	629209
ELECTRONIC											
Operating Frequency	127 kHz	125 kHz	131 kHz	134.2 kHz					13.56 MHz		
Chip Type	Unique			EM4305		FDX-b BDE		HDX BDE	Vigo		ICODE SLIX
Memory	64 bit read-only			512 bit EEPROM		128 bit read-only			1664 bit EEPROM		1024 bit EEPROM (896 bit user)
Anti-collision									Yes		
Reading Distance	Dependent upon reader, environment and application			Up to 35% more than standard tag of same size		Dependent upon reader, environment and application					
PHYSICAL											
Dimensions	Ø 0.08 x 0.47 in (Ø 2.12 x 12 mm)	Ø 0.15 x 0.85 in (Ø 4 x 21.7 mm)	Ø 0.12 x 0.51 in (Ø 3.15 x 13.3 mm)	Ø 0.08 x 0.35 in (Ø 2.12 x 9 mm)	Ø 0.08 x 0.49 in (Ø 2.12 x 12.5 mm)	Ø 0.12 x 0.51 in (Ø 3.15 x 13.3 mm)	Ø 0.15 x 0.85 in (Ø 4 x 21.7 mm)	Ø 0.15 x 0.88 in (Ø 3.85 x 22.5 mm)	Ø 0.08 x 0.47 in (Ø 2.1 x 12.0 mm)	Ø 0.12 x 0.51 in (Ø 3.15 x 13.3 mm)	Ø 0.15 x 0.85 in (Ø 4 x 21.7 mm)
Tagging Method	External housing										
Housing Material	Bioglass										
CHEMICAL AND MECHANICAL											
Water	IP68, 68° F (20° C), 3.3 ft (1 m) x 24 h										
Withstands Exposure To	Alcohol, ammonium chloride 25%, fuel B, HCL 10%, saltwater										
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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THERMAL											
Storage	-40° to +194° F (-40° to +90° C)										
Operating	-40° to +194° F (-40° to +90° C)			-13 °to +185° F (-25° to +85° C)							
Peak	248° F (120° C), 100 h; 284° F (140° C), 10 h										
OTHER											
Standards						EN14803			ISO 15693, ISO 18000-3		
Options	Alternative sizes and chips (e.g. EM4305, EM4200/4102, custom programming)										
Box Size	5,000 pcs for GT Mini 2,000 pcs for all 12 mm, 12.5 mm, 22 mm and 22.5 mm tags 1,000 pcs for 13 mm and 3,000 pcs for 9 mm tags 300 pcs for GT I-Code SLIx 629209										
Warranty	2 years										