

# Logi Tag™

Discreet RFID tags that withstand liquid immersion, high pressure conditions and extreme temperatures



HID Logi Tag™ transponders endure severe conditions while protecting data integrity. These small, thin discs enable discreet placement in a broad range of applications.

The smallest Logi Tag discs are ideal for tagging industrial tools and small equipment. Among the smallest HF tags available, Logi Tag 081 and 121 units are assembled using patented DBond™ Vigo™ technology that enables HID to produce tags in thinner, smaller formats without compromising performance. They mount with industrial adhesives, with options for metal or non-metal surfaces. Logi Tag HF transponders are NFC Tag Type 5 compliant when formatted with NDEF data structure. Alternatively, LogiTag 180 is a RAIN® RFID near-field UHF coin to be used with standard EPC-Gen2 equipment.

As part of a commercial laundry logistics system, Logi Tag discs ensure accurate item counting and documentation, while enabling automatic billing and real-time inventory control.

Logi Tag discs enable medical facilities automatically track clothing, linens, rags, surgical sponges, and life-saving equipment.

Effective tracking of reusable assets and verification of cleaning and sterilization procedures ensures better patient and staff safety through improved infection control.

Logi Tag discs are easily sewn into the hem or seam of a garment, uniform, napkin, tablecloth or runner. They may also be affixed to custodial supplies, such as mats, mops, washrags and towels or are used to tag the hangers to automate laundry workflows. The Logi Tag Button 162 transponder is indistinguishable from ordinary buttons, and can be sewn onto clothing with standard stitching equipment and processes.

Logi Tag transponders empower logistics applications via radio frequency identification (RFID) technology, enabling more accurate, efficient asset management and inventory control processes. LogiTag 161 is also available in a radiation resistant, high-memory FRAM option for most demanding application scenarios. Some HF LogiTag 161 (see PN “-EX”) are ATEX and IECEx certified for use in explosive environments.



## KEY BENEFITS:

- **Inconspicuous** – Compact form factors conceal easily in textile assets, hand tools or small equipment.
- **Durable** – Resistant to extreme temperature, chemicals, fluids, industrial detergents and high pressure.
- **Powerful** – Rapid, accurate asset identification and data storage, with anti-collision functionality for simultaneous processing of multiple items.

## TECHNOLOGY HIGHLIGHTS:

- LF 125 kHz, HF 13.56 MHz / NFC or UHF near-field
- 64-bit UID; up to 8KB read-write user memory, crypto options (Vigo™ 2K)
- Anti-collision, multi-read capable (HF)
- High chemical and mechanical resistance
- Temperature resistant up to 347° F (175° C)
- Options for mounting on metal or non-metal surfaces, or radiation resistant FRAM

## APPLICATION AREAS:

### ASSET TRACKING AND LOGISTICS












- Inventory
- Tools and small equipment

### LAUNDRY

- Automated accounting of cleaning
- Automated sorting and inventory
- Clothing, uniforms
- Commercial laundry
- Owner identification

### MEDICAL AND HEALTH

- Hospital laundry
- Medical and surgical accessories

	120			160	081	121	121 OM	161		162 Button	180	
												
Base Model Number	624115-001	612115	601115-102	601106	6A9081-010 (Vigo 1K)	6A9121-010 (Vigo 1K), 629121-012 (SLIX2)	6A9121-310 (Vigo 1K), 629121-312 (SLIX2)	629108-411 629108-412-EX (ATEX/IECEX) 629108-401 (ICODE SLIX)	634108-410 (F-Mem 2K), 6D1108-410 (F-Mem 8K)	629110-411	6H2112	
	ELECTRONIC											
Operating Frequency	125 kHz				13.56 MHz						860-960 MHz (Worldwide)	
Chip Type	Hitag S	Q5	Unique	Vigo or ICODE SLIX2			ICODE SLIX2	F-Mem	ICODE SLIX2	Monza R6-P		
Memory	2048 bit EEPROM	264 bit EEPROM	64 bit read-only	1024 bit (Vigo) or 2560 bit UM (ICODE SLIX2)			2560 bit UM	2 or 8 Kbyte FRAM	2560 bit UM	28/96 bit EPC, 32/64 bit UM		
Anti-Collision	Yes	yes	Yes			Yes						
Reading Distance [4 W reader]					Proximity		Up to 13.4 in (34 cm)				Proximity	
	PHYSICAL											
Dimensions (for exact dimension tolerances, request drawing)	Ø 0.5 × 0.1 in (12 x 2 mm)			Ø 0.6 × 0.1 in (16 x 3 mm)	Ø 0.31 × 0.1 in (8 x 2 mm)	Ø 0.49 × 0.1 in (12.4 x 2 mm)		Ø 0.6 × 0.1 in (16 x 3 mm)		Ø 0.6 × 0.1 in (16 x 2.5 mm)	Ø 0.6 × 0.1 in (18 x 3 mm)	
Mounting Method	Sew into, glue, embed									Sew on	Sew into, glue, embed	
Embeds In / Affixes To	Clothing and Textiles, non-metal Tools and Boxes					Non-metal	Metal	Clothing and Textiles, non-metal Tools and Boxes				Non-metal
Housing Material	PPS with epoxy potting			Epoxy	ABS with epoxy potting	PPS with epoxy potting		PPS				Polycarbonate
Color	Black							White				Transparent Blue
Weight	0.02 oz (0.6 g)			0.04 oz (1.1 g)	0.004 oz (0.11 g)	0.01 oz (0.4 g)		0.04 oz (1.0 g)			0.03 oz (0.85 g) 0.02 oz (0.75 g)	
	CHEMICAL AND MECHANICAL RESISTANCE											
Water	IP68, 68° F (20° C), 3.3 ft (1 m) x 24 h							IP68, 68° F (20° C), 3.3 ft (1 m) x 24 h			IP68, 6.6 ft (2 m) x 24 h	
Pressure	70 bars, 3 min isostatic							70 bars, 3 min isostatic				
Withstands Exposure To	Bleach (5%), caustic soda (pH 11), formic acid (pH7), gasoline, HCL (10%), oil, petroleum, salt water				Fuel B, mineral and vegetable oils, petroleum, salt mist			Hydrogen peroxide (5%), industrial laundry detergent (pH 10 - 11), neutralizing agent, perchlorethylen (100%)				
Environmental Test Conditions	68° F (20° C), 100 h											
Vibration	IEC 68.2.6 [10g, 10...2000Hz, 3 axis, 2.5 h]											
Shock	IEC 68.2.29 [40g, 18ms, 6 axis, 2000 x]											
Drop Test	100 x 6 ft (1.8 m)											
Axial/Radial Force	800 N / 500 N, 10 sec			1000 N / 1000 N, 10 sec	800 N / 500 N, 10 sec			800 N / 500 N, 10 sec			1000 N / 1000 N, 10 sec	
	THERMAL											
Storage	-40° to +266° F (-40° to 130° C), 1000 h			-13° to +248° F (-25° to +120° C), 1000 h	-40° to +194° F (-40° to +90° C), 1000 h			-40° to +185° F (-40° to +85° C), 1000 h				
Operating	-13° to +185° F (-25° to +85° C)	-40° to +185° F (-40° to +85° C)				-40° to +194° F (-40° to +90° C)		-13° to 185° F (-25° to +85° C)			-40° to +185° F (-40° to +85° C)	
Shock/Fatigue	68° to +320° F (20°C to +160°C), 100 x 5 min with 30 sec transition				-40° to +194° F (-40°C to +90°C), 100 x 5 min with 30 sec transition			68° to +356° F (20°C to +180°C), 300 x 5 min with 30 sec transition			-40° to +185° F (-40°C to +85°C), 100 x 5 min with 30 sec transition	
Peak	320° F (160° C), 35 h							248° F (120° C), 100 h, 428° F (220° C), 30 sec		248° F (120° C), 100 h	284° F (140° C), 100 h	
Spin dryer / tunnel finisher (set point)				347° F (175° C), 100 x 10 min				347° F (175° C), 100 x 10 min				
	OTHER											
Standards	EN 60079-0:2009, EN 60079-11:2007, EN 50303:2001				EN 60079-0:2009, EN 60079-11:2007, EN 50303:2001 ISO 15693, ISO 18000-3, NFC Tag Type 5 (optional)						UHF EPC Class 2 Gen 2, ISO 18000-6C	
Options	Custom printed logo				Custom printed logo, Vigo chip 1.6K			Custom embossed logo, UID laser engraving		Laser engraving		
Box Size	2,500 pcs			2,000 pcs	5,000 pcs	2,500 pcs		2,000 pcs				
Warranty	2 Years											



I M1 Ex ia I Ma  
II 1G Ex ia IIC T6 Ga  
II 1D Ex ia IIC T85C Da

