



# SlimFlex™ Tag



Custom color options are available, and tags can be embossed or laser-engraved with a logo or message for branding or enhanced visual identification.

## PLIABLE RFID TAGS MOUNT ANYWHERE AND ENDURE RUGGED CONDITIONS

- **Flexibility** – Repeated bending will not impede performance; enables secure mounting on rounded or irregular surfaces
- **High durability** – Resistant to liquids, dust, impact and weather extremes
- **Enhanced reliability** – Precise, consistent read ranges when mounted to plastic or wood

HID Global® SlimFlex™ RFID tags are among the most advanced general purpose flexible tags available. The unique thermoplastic polyurethane (TPU) housings – made from the same materials used worldwide to manufacture automobile pipes and hoses – tolerate repeated bending or torsion, while maintaining excellent performance characteristics. The durable housing safeguards embedded electronics, even under harsh conditions.

SlimFlex passive contactless transponders improve data collection speed and accuracy for logistics applications.

Anti-collision functionality, fast data-rate communication and password data protection enable precise, reliable reading and updating of each tag's large user memory. SlimFlex tags are compliant with ISO certified readers and modules. All SlimFlex RFID tags are waterproof. They can be used in deep-sea operations, provide high resistance to aggressive liquids and UV rays, and deliver reliable performance and reading stability at high and sub-freezing temperatures.

### Available in multiple configurations:

- Rectangular **SlimFlex tags** attach snugly to round or irregular surfaces, such as cylindrical containers, plastic pipes, helmets or even trees. These tags conform to surface contours, and can be securely attached with cable ties, industrial adhesives, rivets or screws.
- Designed for garments, each **SlimFlex Laundry tag** withstands chemical exposure and high temperature of related washing cycles. This small, flexible white strip can be discreetly sewn into the hem of clothing, unnoticeable to users during everyday operations. SlimFlex Laundry tags enable automated sorting, inventory and accounting for commercial cleaners. For commercial linen, please refer to the HID LinTRAK® tag, which has been optimized for this use case.
- The **SlimFlex Tag Washer** has been designed with one reinforced hole to rivet it. This version is ideal whenever a SlimFlex tag shall be fixed with a single rivet to hang down from metal bars or be placed on a hook.
- The thin **SlimFlex Ultra** is optimized for non-metallic flat or slightly curved surfaces. Its special construction ensures a higher durability compared to traditional label designs. Optional laser marking is performed into the structure of the tag to make it permanent. The SlimFlex Ultra is delivered as single pieces with strong adhesive and easy peel off tape for fast mounting.

### TECHNOLOGY HIGHLIGHTS:

- HF 13.56 MHz version readable with ISO/IEC 15693 compatible NFC devices with tag option for on-metal use.
- Broadband UHF version for worldwide use at 860 to 960 MHz.
- Fully interoperable, standards compliant.
- Bendable, durable housing.
- Waterproof; resistant to chemicals, impact and UV rays.
- Large user memory.
- 1D barcode laser engraved optional

### APPLICATION AREAS:

#### Asset tracking and logistics

- Inventory management
- Itemize tracking of pallets and goods
- Cylindrical items such as plastic bins or tree trunks

#### Laundry, medical & health

- Uniform companies
- Commercial laundry
- Hospital laundry
- Medical compartments

#### Returnable transport items

- Shipping container or pallet tracking

#### Waste management

- Commercial and industrial plastic bin identification

## SPECIFICATIONS

	SlimFlex™ Tag										
	HF			UHF							
	200	OM (on-metal)	Standard	200	301	Laundry 2G	Mini	Washer	Ultra		
<b>Base Model Number</b>	629990 (blank) 629990-020 (ID barcode)	62999C-101 (Yellow) 62999C-102 (White)	6H2990-101	6H2990-200 6H2990-220 (ID barcode)	6H2990-300	698992	69899A	798990-302	6H2P10 (Laser marking optional)		
<b>ELECTRONIC</b>											
<b>Operating Frequency</b>	13.56 MHz			860-960 MHz (EU, US, JP)							
<b>Chip Type</b>	ICODE SLix			Monza R6-P			Higgs 3		Monza R6-P		
<b>Memory</b>	1024 bit EEPROM			128/96 bit EPC, 32/64 bit UM			512 bit user memory + 96 bit EPC + 64 bit TID		128/96 bit EPC, 32/64 bit UM		
<b>Anti-Collision</b>	Yes										
<b>Reading Distance (2W reader ERP, free space)</b>				Up to 19.7 ft (6 m)		Up to 16.4 ft (5 m)	Up to 13.1 ft (4 m)	Up to 19.7 ft (6 m)	Up to 13.1 ft (4 m)		
<b>PHYSICAL</b>											
<b>Dimensions</b>	3.3 x 1.0 x 0.1 in (83 x 25 x 3 mm)	3.3 x 1.0 x 0.2 in (83 x 25 x 6 mm)	3.0 x 1.0 x 0.1 in (77 x 25 x 3 mm)	3.3 x 1.0 x 0.12 in (83 x 25 x 3 mm)	3.4 x 1.0 x 0.1 in (87 x 25 x 3 mm)	2.2 x 0.5 x 0.08 in (55 x 12 x 2.2 mm)	2.5 x 0.5 x 0.08 in (65 x 12 x 2 mm)	4.3 x 1.0 x 0.1 in (110 x 25 x 3 mm)	2 x 0.9 x 0.03 in (50 x 24 x 0.7 mm)		
<b>Mounting Method</b>	Cable tie, glue, rivet, screw	Cable tie	Glue, rivet, screw	Cable tie vertical to surface, glue, rivet, screw	Cable tie flush with surface, glue, rivet, screw	Sew into hem, glue	Cable tie, glue, rivet, screw	Aluminum Rivet	Solvent based Acrylic adhesive		
<b>Fixation Hole Size</b>	0.2 x 0.1 in (6 x 2.5 mm)		Ø 0.1 in (3 mm)	0.2 x 0.1 in (6 x 2.5 mm)	Ø 0.27 in (7 mm)	[none]	0.25 x 0.08 in (6.5 x 2 mm)	Ø 0.18 in (4.8 mm)	(None)		
<b>Affixes To</b>	Any material (vertical mount)	Any material (flat mount)	Plastic, dry wood	Any material (vertical mount)	Plastic, dry wood	Cloth fabric, plastic	Any material (vertical mount)		Non-metallic surfaces		
<b>Housing Material</b>	TPU			TPE			TPU		Polycarbonate		
<b>Color</b>	Yellow (Pantone 108)	Yellow (Pantone 108) White (RAL 9016)	Green	Yellow (Pantone 108)		White		Yellow	White		
<b>Weight</b>	0.2 oz (6 g)	0.3 oz (8.5 g)	0.2 oz (6 g)			0.05 oz (1.4 g)		0.3 oz (9 g)	0.03 oz (0.9 g)		
<b>CHEMICAL AND MECHANICAL RESISTANCE</b>											
<b>Water</b>	IP68, 68° F (20° C), 6.6 ft (2 m) x 24 h										
<b>Withstands Exposure To</b>	Mineral oil, petroleum, salt mist, vegetable oil, HCL (10%), Bleach (5%); UV light										
<b>Environmental Test Conditions</b>	68° F (20° C), 100 h										
<b>Vibration</b>	IEC 68.2.6 [10 g, 10 to 2000 Hz, 3 axis, 2.5 h]										
<b>Shock</b>	IEC 68.2.29 [40 g, 18 ms, 6 axis, 2000 times]										
<b>Axial / Radial Force</b>	1000 N, 10 sec										
<b>Water Press Extraction (set point)</b>						70 bars (5 min)					
<b>Impact</b>	IEC 62262-IK06										
<b>Drop Test</b>	100 drops 5.9 ft (1.8 m)										
<b>Bending</b>	5.9 in (150 mm) curve radius			500 each side, 10 mm radius; 500 each side, 180° twist			5.9 in (150 mm) curve radius		5x500 each side, 27 mm radius; 500 each side, 45° twist		
<b>THERMAL</b>											
<b>Storage</b>	-40° to +158° F (-40° to +70° C)					-40° to +185° F (-40° to +85° C)		-40° to +158° F (-40° to +70° C)		-22° to +176° F (-30° to +80° C)	
<b>Operating Temperature</b>	-40° to +158° F (-40° to +70° C)					-40° to +185° F (-40° to +85° C)		-40° to +158° F (-40° to +70° C)		-22° to +176° F (-30° to +80° C)	
<b>Peak</b>	212° F (100° C), 100 h					248° F (120° C), 100 h; 428° F (220° C) [20 bars, 10 x 10 sec, with thin tissue between iron and tag]				212° F (100° C), 100 h	
<b>Shock/Fatigue</b>	-40° to +158° F (-40° to +70° C), 100 x 5 min with 30 sec transition					+68° to +320° F (+20° to +160° C), 200 x 5 min with 30 sec transition		-40° to +185° F (-40° to +85° C), 100 x 5 min with 30 sec transition		-40° to +158° F (-40° to +70° C), 100 x 5 min with 30 sec transition	-22° to +176° F (-30° to +80° C), 100 x 5 min with 30 sec transition
<b>OTHER</b>											
<b>Standards</b>	ISO/IEC 15693, 18000-3 Mode 1, NFC Tag Type 5 (if NDEF formatted)			UHF EPC Class 1 Gen 2, ISO 18000-6C, RAIN							
<b>Options</b>	Laser engraving, custom encoding, alternate colors		Custom embossed logo, alternate colors	Laser engraving, custom embossed logo, alternate colors				Laser engraving, printing, encoding			
<b>Box Size</b>	1,000 pcs	500 pcs	500 pcs.	1,000 pcs.		1,500 pcs.		1,000 pcs.	3,000 pcs.		
<b>Warranty</b>	2 Years										