HID®

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 UHF RFID TAGS MOUNT ANYWHERE AND DELIVER LONG READ RANGES WHILE ENDURING RUGGED CONDITIONS

- **Flexibility** – Repeated bending will not impede performance; enables secure mounting on rounded or irregular surfaces

- **High durability** – Resistant to outdoor elements

- **Enhanced reliability** – Read-write up to 26.3 ft (8 m) when mounted to plastic or wood

- **Broadband UHF** – Usable worldwide, including Europe, the United States and Japan

HID Global® SlimFlex™ RFID tags are among the most advanced general purpose UHF tags available. The unique thermoplastic elastomer (TPE) 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.

UHF technology enables anti-collision functionality, fast data-rate communication and password data protection for precise, reliable reading and updating of each tag's 512-bit user memory. SlimFlex tags are compliant with EPC global certified UHF Class 1 Gen 2 readers and modules, and have broadband capability for worldwide operations.

All SlimFlex RFID tags are waterproof and food compatible. They provide high resistance to aggressive liquids and UV rays, and deliver reliable performance and reading stability at high and sub-freezing temperatures.

The tags are available in three configurations:

■ The standard SlimFlex tag enables read ranges up to 26 ft (8 m), and attaches snugly to round or irregular surfaces, such as cylindrical containers, plastic pipes, helmets or even trees. The tag conforms to surface contours, and can be securely attached with cable ties, industrial adhesives, rivets or screws.

■ The patent pending SlimFlex™ Laundry tag withstands the chemical exposure and high temperatures of repeated commercial washing, drying and pressing cycles. This small, flexible white strip can be discreetly sewn into the hem of clothing or linens, unnoticeable to users during everyday operations. With a read range of up to 8.2 ft (2.5 m), SlimFlex Laundry tags enable automated sorting, inventory and accounting for commercial cleaners.

■ The SlimFlex™ Square tag is the largest configuration and delivers read ranges of up to 26 ft (8 m) in dry conditions when mounted to any non-metal surface. The tag maintains its read range even in wet conditions when mounted vertically to a flat surface or extended from a corner. Among other applications, this tag works well for tracking non-metal pallets and shipping containers.

TECHNOLOGY HIGHLIGHTS:
- Worldwide operating frequencies from 860 to 960 MHz.
- Fully interoperable, standards compliant.
- Bendable TPE housing.
- Waterproof; resistant to chemicals, impact and UV rays.
- Food compatible.
- Large 512-bit user memory.

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				
	Standard	**Standard-200**	**Standard-301**	**Laundry**	**Square**
Base Model Number	798990	798990-200	798990-301	6B5900	698991
ELECTRONIC					
Operating Frequency	860-960 MHz (EU, US, JP)				
Chip Type	Higgs 3			G2iM	Higgs 3
Memory	96 bit EPC + 64 bit TID + 512 bit user memory			256 bit EPC + 512 bit user memory + 96 bit TID	96 bit EPC + 64 bit TID + 512 bit user memory
Anti-Collision	Yes				
Reading Distance (2W reader ERP, free space)	Up to 26.3 ft (8 m)			Up to 8.2 ft (2.5 m)	Up to 26.3 ft (8 m)
PHYSICAL					
Dimensions	3.0 × 0.98 × 0.12 in (77 × 25 × 3 mm)	3.27 × 0.98 × 0.12 in (83 × 25 × 3 mm)	3.42 × 0.98 × 0.12 in (87 × 25 × 3 mm)	2.2 0.47 0.09 in (55 × 12 x 2.3 mm)	4.5 × 3.3 × 0.12 in (115 × 85 × 3 mm)
Mounting Method	Glue, rivet, screw	Cable tie vertical to surface, glue	Cable tie flush with surface, glue, rivet, screw	Sew into hem, glue	Glue, rivet, screw
Fixation Hole Size	Ø 0.12 in (3 mm)	0.23 x 0.08 in (6 x 2 mm)	Ø 0.27 in (7 mm)	[none]	Ø 0.16 in (4 mm)
Affixes To	Plastic, dry wood	Any material	Plastic, dry wood	Cloth fabric, plastic	Plastic, dry wood
Housing Material	TPE				
Color	Green	Yellow (Pantone 108)		White	Yellow (Pantone 108)
Weight	0.2 oz (6 g)	0.22 oz (6.2 g)		0.06 oz (1.6 g)	0.9 oz (25 g)
CHEMICAL AND MECHANICAL RESISTANCE					
Water	IP68, 68° F (20° C), 3.3 ft (1 m) x 24 h				
Withstands Exposure To	Mineral oil, petroleum, salt mist, vegetable oil, , HCL (10%), Bleach (5%); UV light; food compatible				
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]				
Axial / Radial Force	1000 N, 10 sec				
Water Press Extraction (set point)				70 bars (10 sec.)	
Impact	IEC 62262-IK06				
Drop Test	100 drops 5.9 ft / 1.8m				
Bending	5.9 in (150 mm) curve radius			+68° to +320° F (+20° to +160° C), 200 × 5 min with 30 sec transition	3000 times when vertically mounted
THERMAL					
Storage	-40° to +158° F (-40° to +70° C)			-40° to +185° F (-40° to +85° C)	-40° to +158° F (-40° to +70° C)
Operating Temperature	-40° to +158° F (-40° to +70° C)			-40° to +185° F (-40° to +85° C)	-40° to +158° F (-40° to +70° C)
Peak	212° F (100° C), 100 h;			248° F (120° C), 100 h; 428° F (220° C) [20 bars, 10 ×10 sec, with thin tissue between iron and tag]	230° F (110° C), 100 h
Shock/Fatigue	-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 × 5 min with 30 sec transition	-40° to +158° F (-40° to +70° C) , 100 x 5 min with 30 sec transition
OTHER					
Standards	UHF EPC Class 1 Gen 2, ISO 18000-6C				
Options	Custom embossed logo, alternate colors	Laser engraving, custom embossed logo, alternate colors			
Box Size	500 pcs.	1.000 pcs.		1.500 pcs.	240 pcs.
Warranty	2 Years				

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