

InLine Tag™ Ultra



ROBUST, ALL-PURPOSE RAIN® UHF TAGS MOUNT TO ANY SURFACE MATERIAL AND DELIVER LONG READ RANGES

- **Extreme durability** – resistant to outdoor elements as well as blunt and sharp impact
- **Multiple mounting options** – glue, screw, rivet or weld
- **Enhanced reliability** – read-write on any material, up to 26 ft (8 m)
- **Broadband frequency** – for worldwide use

HID Global's InLine Tag™ Ultra transponders are the most advanced general-purpose RAIN® RFID UHF tags available. Choose from options that mount on any material while enabling read ranges of up to a 33 ft (10m).

InLine Tag devices improve data collection speed and accuracy for logistics applications, while making tracking more cost-effective. These tags make it possible to identify individual, liquid-filled kegs using RFID readers, as truckloads of them pass through designated points of distribution and delivery.

RAIN® RFID technology enables anti-collision functionality, fast data-rate communication and password data protection for precise, reliable reading and updating. All InLine Tag transponders are compliant with EPC global-certified UHF Class 1 Gen 2 readers and modules, including broadband capability for international operations.

The tough and versatile InLine Tag transponders are available for mounting on metal, plastic or wood using standard M5 screws, rivets, industrial adhesives or welding. The tags are lightweight,

waterproof and resist high-pressure/high temperature washing conditions. The special material and construction of InLine Tag Ultra Pro and Combo provides extra resistance to aggressive chemicals like Caustic Soda.

InLine Tag Ultra RFID tags include HID Global's patented 3D antenna, enabling omnidirectional read range performance independent of mounting material. The larger tags also enable maintenance of separate public and private profiles for added data security.

The InLine Tag Ultra Combo version includes an ICODE SLIX2 chip for industrial HF or NFC interaction in addition to RAIN® RFID logistics. Slim versions of the tags enable optimal performance for space-restricted applications, and are configured for attachment via screw or weld.

With the smallest footprint, the Mini version is ideal for tagging roll-cages, boxes, furniture or tools. They attach to any material, and deliver excellent size-to-performance ratios.

TECHNOLOGY HIGHLIGHTS:

- Worldwide operating frequencies from 860 to 960 MHz + optional NFC
- Fully interoperable; standards compliant
- Reliable performance on both metal and non-metal surfaces
- Waterproof under high pressure / high temperature conditions; chemical and impact resistant
- Mounting options include nails, screws, rivets, welding and glues
- Large memory of up to 512-bit user memory and 128-bit EPC; 2560 bit HF/NFC

APPLICATION AREAS:

■ Asset tracking and logistics

- Postal and road toll management: truck, wagon and train tracking
- Supply chain management: pallet and goods tracking
- Furniture, boxes and tools

■ Returnable transport items

- Shipping container tracking
- Metal keg and gas cylinder identification

■ Waste management






- Commercial and industrial bin identification



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



SPECIFICATIONS

	InLine Tag™ Ultra				
	Mini	Standard	Slim	Pro	Combo
					
Base Model Number	6F1987-102	6A7980 (blue) 6A7980-102 (grey) 6A7980-120 (grey, 1D-barcode) 6A7981 (weld)	6A7983 6A7984 (slim weld)	6A7980-401 (blue) 6A7980-402 (grey) 6A7981-402 (weld)	6A7980 -102
ELECTRONIC					
Operating Frequency	865-956 MHz (worldwide)				865-956 MHz (worldwide) / NFC
Chip Type	Monza R6	Monza 4QT			Monza R6-P + ICODE SLIX2
Memory	96 bit EPC + 48 bit TID	128 bit EPC + 96 bit TID + 512 bit user memory			128 bit EPC 96 bit TID + 2560 bit ICODE SLIX2
Anti-Collision	Yes				
Reading Distance (2W reader ERP, free space)	Up to 9.8 ft (3 m)	Up to 26.2 ft (8 m)	Up to 16.4 ft (5 m)	Up to 22.9 ft (7 m)	Up to 32.8 ft (10 m)
PHYSICAL					
Dimensions	2.4 × 0.7 × 0.3 in (60 × 18 × 8 mm)	3.8 × 1.1 × 0.6 in (97 × 27 × 15 mm) Weld: 4.1 × 1.4 × 0.6 in (105 × 35 × 15 mm)	3.8 × 1.1 × 0.4 in (97 × 27 × 10 mm) Weld: 4.1 × 1.4 × 0.4 in (105 × 35 × 10 mm)	3.8 × 1.1 × 0.6 in (97 × 27 × 15 mm) Weld: 4.1 × 1.4 × 0.6 in (105 × 35 × 15 mm)	3.8 × 1.1 × 0.6 in (97 × 27 × 15 mm)
Mounting Method	Screw, rivet	Screw, weld			
Screw Mounting Hole	Ø 0.2 in (4.5 mm)	Ø 0.2 in (5.2 mm)			
Affixes To	All surfaces, including metal, plastic, wood				
Housing Material	High-impact plastic, Weld : stainless steel ring				
Color	Gray	Pantone blue 287C or grey (custom colors available)			Gray
Weight	0.2 oz (6.3 g)	0.5 oz (16 g) Weld : 0.6 oz (18 g)	0.4 oz (12 g) Weld : 0.5 oz (14 g)	0.8 oz (23 g) Weld : 0.9 oz (26 g)	
CHEMICAL AND MECHANICAL					
Water	IP68, IP69K, 176° F (80° C), 100 bar, 30 sek. 16 l/min			IP68, 68° F (20° C), 1 m × 24 h	
Withstands Exposure To	Mineral oil, petroleum, salt mist, vegetable oil; up to 80% humidity at 158° F (70° C)			+ Caustic Soda (5%)	
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]				
Impact	IEC 62262-IK07	IEC 62262-IK09		IEC 62262-IK08	
Axial/Radial Force	1000 N, 10 sec				
THERMAL					
Storage	-40° to +185° F (-40° to +85° C), 1x1000 h-40° to +185° F (-40° to +85° C), 1x1000 h				
Operating Temperature	-40° to +185° F (-40° to +85° C)				
Shock/Fatigue	-40° to +185° F (-40° to +85° C), 100 × 5 min with 20 sec transition				
OTHER					
Standards	UHF EPC Class 1 Gen 2, ISO 18000-6C, ISO 17364, DIN 40050-9				+NFC Tag Type 5
Options	Custom embossed logo, no logo or custom tag color. Laser engraving of custom logo, barcode or text on grey tag versions. By default, grey tags are supplied without logo or laser engraving.				
Box Size	250 pcs.	240 pcs.	360 pcs.	240 pcs.	
Warranty	2 Years				