

# FIT Brick Tag

Miniature tags mount or embed discreetly to tools, equipment, medical instruments and more.



HID Global FIT Brick Tag LF/HF passive contactless transponders easily integrate into RFID applications requiring discreet placement of small, featherweight tags that deliver sustainable performance.

The FIT Brick Tag ABS Vigo™ transponder is among the smallest HF tags available. These units are assembled using patented DBond™ Vigo™ technology that enables HID Global to produce tags in thinner, smaller formats without compromising performance. The tags provide a programmable user memory, optionally usable for NFC applications. Additional cryptographic functions are optionally available to support security sensitive applications like product authentication against counterfeit goods.

The epoxy FIT Brick Tag Nova and FIT Brick Tag HDX low frequency transponders are small and tough and come in a standardized form factor to act as security transponder in car keys. The Nova tag's read-write memory is easily programmed to suit custom applications. The HDX version is read-only, and meets ISO 11784 and ISO 11785 standards. Both withstand extreme temperatures, and provide high water, chemical and shock resistance. Widely used in key fobs for automobile immobilizer theft prevention systems, these devices are also ideal for tool tracking, or cable inventory or other OEM applications that require robust, embeddable RFID tags. For long read-range on-metal RAIN® RFID UHF applications like tool tracking, see the HID FIT Ceramic Tag family on a separate data sheet.



## KEY BENEFITS




- **Small footprints** – Embeddable in space-restricted applications.
- **Exceptional durability** – Withstand physical stress, are dust tight, and resistant to water, chemicals, acids and temperature extremes.
- **Versatility** – Available in LF, and HF (for UHF see HID FIT Ceramic Tags); may be customized to fit application requirements.

## TECHNOLOGY HIGHLIGHTS:

- Resistant to chemicals, shock and vibration
- Tiny footprints
- Heat resistant
- Waterproof
- LF, HF/NFC options

## APPLICATION AREAS:

- **Asset tracking and logistics**
  - Cable identification
  - Tool or weapon inventory and management
- Key fobs for automobile immobilization systems
- **Medical and health**
  - Surgical instrumentation tracking
  - Medical equipment status and utilization

	FIT Brick Tag		
	Epoxy		ABS
	Nova	HDX	Vigo
			
Base Model Number	933504	9B7513	6A9904
	ELECTRONIC		
Operating Frequency	130 kHz	134.2 kHz	13.56 MHz
Chip Type	Nova	HDX	Vigo
Memory	160 bit EEPROM	128 bit read-only	64 bit UID, 1024 bit EEPROM
Anti-Collision			Yes
Reading Distance	Proximity		
	PHYSICAL		
Dimensions	0.5 × 0.2 × 0.1 in (12 × 6 × 3 mm)		0.4 × 0.1 × 0.1 in (10 × 3 × 2.5 mm)
Mounting Method	Enclose		
Affixes to	Any material		
Housing Material	Epoxy overmolded		ABS coffin potted w/ epoxy
Color	Black		
Weight	0.02 oz (0.45 g)		0.005 oz (0.15 g)
	CHEMICAL AND MECHANICAL RESISTANCE		
Water	IP68, 68° F (20° C), 1 m × 24 h		
Withstands Exposure To	Bleach, caustic soda, formic acid, gasoline, HCL, oil, salt water		
Environmental Test Conditions	68° F (20° C), 100 h		
Axial / Radial Force	500 N, 10 sec		
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]		
Drop Test	100 × 1 m		
Pressure	100 bar, 5 min		
	THERMAL		
Storage	-40° to +248° F (-40° to +120° C), 1 × 1000 h		-13° to +158° F (-25° to +70° C), 1 × 1000 h
Operating	-40° to +194° F (-40° to +90° C)		-13° to +158° F (-25° to +70° C)
Shock/Fatigue	-40° to +194° F (-40° to +90° C), 200 × 20 min with 30 sec transition		-13° to +158° F (-25° to +70° C), 200 × 5 min with 30 sec transition
Peak Temperature	284° F (140° C), 100 h		
	OTHER		
Standards		ISO 11784, 11785	ISO 15693, 18000-3, NFC Tag Type 5 when NDEF formatted
Options	Alternative LF or HF integrated chips		
Quantity Per Box	500 pcs.		4,000 pcs.
Warranty	2 years		

For more information, contact [tagsales@hidglobal.com](mailto:tagsales@hidglobal.com)



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