HID®

HID Trusted Tag®
Services

CLOUD-BASED AUTHENTICATION SERVICES AND NFC TRUSTED TAGS FOR INTERNET OF THINGS APPLICATIONS

- **Secure** – Encrypted data changes on every tap, blocking attempts to share, clone or manipulate tags or URLs.
- **Frictionless operation** – Simply tap to interact, no app to create or download.
- **Streamlined deployment** – No proprietary software or special readers for tag authentication required.
- **Enhanced analytics** – Provides real-time access to precise data and reliable audit trails.
- **Flexible** – Supports NFC-enabled devices and is designed for future support of Bluetooth®-enabled devices.

TECHNOLOGY HIGHLIGHTS

- Fully NFC Forum Type 4 compliant
- Trusted tag cannot be cloned
- Generates cryptographic one-time code upon tap
- No APP needed on NFC readers / phones
- Quick integration into any website
- Choice of service models for verification
- Tamper evident options support "Proof of Presence"
- Lightweight or rugged form factors available

HID Trusted Tag® Services combine HID Global's patented NFC trusted tags with its cloud-based authentication platform to add unique and trusted identities to everyday objects. The innovative and easy-to-use solution facilitates secure, efficient transactions simply by tapping an attached or embedded tag with a smartphone (or other NFC device).

Providing a frictionless authentication experience is not possible with today's standard NFC labels, static tags or QR codes, HID Trusted Tag Services are an ideal choice for "proof of presence", time-and-attendance, brand protection and other Internet of Things applications using NFC-enabled smartphones today and Bluetooth smart devices in the future.

How HID Trusted Tag Services Work:

1. At production time, HID Trusted Tags are programmed with a customer-defined URL that points to your website. Your website hosts the user experience for users who will tap tags with their phones.

2. Every time a user taps their NFC mobile phone to a trusted tag, the tag generates a unique cryptographic code. The code is automatically appended as a parameter to the URL that is stored on the tag.

3. This unique URL is then sent to the user's mobile phone, which will open the corresponding website (a process identical to any URL received from an NFC tag).

4. Your website removes the cryptographic parameter from the URL and passes it on to the HID Global cloud authentication service through a single web-service call.

5. The HID Trusted Tag Services authentication cloud verifies whether the code is authentic (i.e.: a true physical tap of a trusted tag) or caused by a shared/copied URL.

6. Based on this information, your website can block the request, offer an alternative to the user, or simply log whether the website was accessed via a physical tap or a shared URL for later analysis.

7. The standards-based cryptographic code changes for every tap, enabling each tap to be authenticated. This is a unique functionality only HID Trusted Tags can provide.

HID Trusted Tag devices are available in a variety of form factors: From simple wet inlay, over ISO card badges to rugged Poly Tag or Asset Tag for outdoor / on-metal use or as eTamper coin that self-destructs upon removal for reliable "proof of presence" applications.

	Epoxy Keyfob	ISO Card	Wet Inlay	eTamper Coin	Poly Tag	InLine Plate Asset Tag
Base Model Number	6D6140-101	6D6401-101	6D6501-101 (29 mm) 6D6500-101 (40 mm)	7H0941-101	6H0131-010	7H5901-101 (white) 7H5900-100 (transparent)

SPECIFICATIONS

Operating Frequency	13.56 MHz
Chip Type	HID Trusted Tag
Memory	8 KB
Anti-Collision	N/A
Reading Distance	Proximity (NFC Tap)

PHYSICAL

	Epoxy Keyfob	ISO Card	Wet Inlay	eTamper Coin	Poly Tag	InLine Plate Asset Tag
Dimensions	1.2 × 1.8 × 0.06 in (30 × 45 × 1.6 mm)	3.4 × 2.1 × 0.03 in (85.6 × 54 × 0.76 mm)	Ø 1.1 in (Ø 29 mm) Ø 1.6 in (Ø 40 mm)	1.5 × 1.5 × 0.3 in (39 × 39 × 8.5 mm)	Ø 1.34 x 0.31 in (Ø 34 x 8 mm)	1.2 × 2.5 × 0.12 in (30 × 65 × 3.5 mm)
Fixation Hole Size	Ø 0.2 in (Ø 5 mm)				Ø 0.20 in (5.4 mm)	0.47 in (12 mm)
Housing Material	Epoxy	PVC	PET	Polycarbonate (PC)	PA6 - high impact	PC/PC Makrolon 2407
Color	Black	White	Transparent	White	Black	White or Transparent

CHEMICAL AND MECHANICAL RESISTANCE

	Epoxy Keyfob	ISO Card	Wet Inlay	eTamper Coin	Poly Tag	InLine Plate Asset Tag
Water	IP68, 6.6 ft. (2 m) x 24 h		IP67, 3.3 ft. (1m) × 35 min	IP 65	IP69K, IP68, 68° F (20° C), 3.3 ft (1 m) x 24 h	IP68, 6.6 ft. (2 m) x 24 h
Withstands Exposure To	Alcohol, ammonium chloride (25%), fuel B, hydrochloric acid (10%), salt water	Acetic acid, artificial perspiration, carbonated water, ethylene glycol, fuel B, humidity (95% at 50° C × 24h), salt mist, salt water, sugared water	Humidity (95% at 50° C × 24h)		Mineral oil, petroleum, salt water, vegetable oil; 90% humidity at 194° F (90° C)	Alcohol, aqueous solution of salts, fuel B, ammonium chloride (25%), hydrochloric acid (10%), salt water
Environmental Test Conditions	68° F (20° C), 100 h				266° F (130° C), 100 h	68° F (20° C), 100 h
Mechanical Resistance	Drop test, 100× 6 ft. (1.8 m)	Dynamic bending and torsion, 4× 250			Drop test, 100 x 6 ft (1.8 m)	
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]					

THERMAL

	Epoxy Keyfob	ISO Card	Wet Inlay	eTamper Coin	Poly Tag	InLine Plate Asset Tag
Storage	-40° to +194° F (-40° to +90° C), 1000 h	-31° to +122° F (-35° to +50° C), 1000 h	Room temperature for inlays on rolls. Operating temperature for single tags.	-40° to +194° F (-40° to +90° C), 1000 h		-40° to +185° F (-40° to +85° C), 1 x 1000 h
Operating	-40° to +185° F (-40° to +85° C)	-31° to +122° F (-35° to +50° C)	-4° to +158° F (-20° to +70° C)	-13° to +158° F (-25° to +70° C)	-13° to +185° F (-25° to +85° C)	-40 °to +185° F (-40° to +85° C)
Shock/Fatigue	-40° to +212° F (-40° to +100° C), 100× 5 min with 30 sec transition	-31° to +176° F (-35° to +80° C), 1000 h	-4° to +158° F (-20° to +70° C), 100× 5 min with 30 sec transition		-22° to +194° F (-30° to +90° C), 50 x 10 min with 30 sec transition	-40° to +185° F (-40° to +85° C), 100 x 5 min with 30 sec transition
Peak	284° F (140° C), 1 × 24 h	176° F (80° C), 1 × 24 h	158° F (70° C), 1 × 24 h		266° F (130° C), 100 h	

OTHER

	Epoxy Keyfob	ISO Card	Wet Inlay	eTamper Coin	Poly Tag	InLine Plate Asset Tag
Standards	ISO 14443A - NFC Tag Type 4	ISO 10373; ISO 7816-1; ISO 14443A - NFC Tag Type 4	ISO 14443A - NFC Tag Type 4			
Options	Surface printing; laser engraving.			Printed Logo, Color	Alternative chips; custom embossed logo; laser engraved serial number	Surface printing; laser engraving.
Comments	Encoding: All tags need to be ordered with your URL programmed by HID.					
Box Size	250 pcs.	2.000 pcs.	2.000 pcs.	300 pcs	800 pcs.	300 pcs.
Warranty	2 Years					

Service Options:

HID Cloud Authentication Service Delivery Models:	Service Part Number (pay per use)
Subscription – Monthly invoice per authenticated tag	TTS-SRVS-0002
Transactional – Monthly invoice per authentication	TTS-SRVS-0001

Multiple authentication accounts can be held concurrently by one client to allow project based accounting. Service fees are charged monthly only for actually used tags or authentications.

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