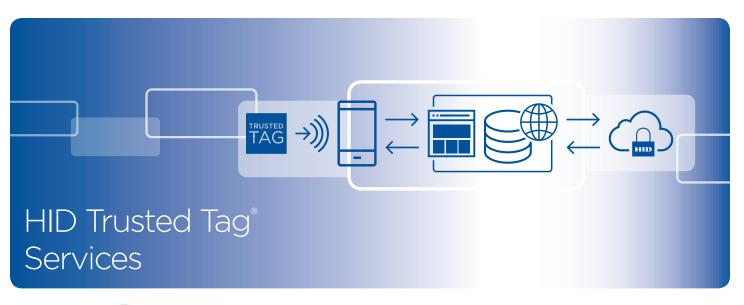
# IOT SERVICES







### 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

## 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<sup>®</sup>-enabled devices.

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", timeand-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:

- 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.
- 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.

- 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.
- 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.
- 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.

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### SPECIFICATIONS



	HID Trusted Tags*						
							InLine Plate Asset Tag
		HO Instead by Service.				2001352	
Base Model Number	6D6140-101	6D6401-101	6l6500-101 (22 mm) 6H5502-101 (23 mm) 6D6500-101 (40 mm)	7H5941-101 7H5941-102 (Laser marked)	6H5101-101 (black) 6H5101-101 (white)	6H0131-010	7H5901-101 (white) 7H5900-100 (transparer
			SPECIFIC	ATIONS			
Operating Frequency							
Chip Type	HID Trusted Tag						
Memory							
Anti-Collision							
Reading Distance				Proximity (NFC Tap	)		
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)	PHYSIC Ø 0.8 in (Ø 22 mm) Ø 0.9 in (Ø 23 mm) Ø 1.6 in (Ø 40 mm)	1.5 × 1.5 × 0.3 in (39 × 39 × 8.5 mm)	Ø 1.2 in (Ø 32.5 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	Ероху	PVC	PET	Polycarb	onate (PC)	PA6 - high impact	PC/PC Makrolon 240
Color	Black	White	Transparent	White	Black or White	Black	White or Transparent
	1	1	CHEMICAL AND MECH	ANICAL RESISTANC	E		
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),	IP68, 6.6 ft. (2 m) x 24
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)		Indoor / office applications	3.3 ft (1 m) x 24 h Mineral oil, petroleum, salt water, vegetable oil; 90% humidity at 194° F (90° C)	Alcohol, aqueous solution of salts, fuel B, ammonium chlorid (25%), hydrochloric ac (10%), salt water
Environmental Test Conditions						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]						
			THER		· · · · · · · · ·		
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 +194° F (-40° to +90° C), 1000 h	-40° to +194° F (-40° to +90° C), 1000 h	-40° to +185° F (-40° to +85° C), 1 x 1000 h
Storage Operating	(-40° to +90° C),	(-35° to +50° C),	inlays on rolls. Operating temperature for single	(-40° to +90° C),	(-40° to +90° C),		(-40° to +85° C), 1 x
	(-40° to +90° C), 1000 h -40° to +185° F (-40° to +85° C) -40° to +212° F (-40°	(-35° to +50° C), 1000 h -31° to +122° F	inlays on rolls. Operating temperature for single tags. -4° to +158° F	(-40° to +90° C), 1000 h -13° to +158° F	(-40° to +90° C), 1000 h -13° to +158° F	(-40° to +90° C), 1000 h -13° to +185° F	(-40° to +85° C), 1 x 1000 h -40 °to +185° F (-40° to +85° C) -40° to +185° F (-40°
Operating	(-40° to +90° C), 1000 h -40° to +185° F (-40° to +85° C) -40° to +212° F (-40° to +100° C), 100× 5 min	(-35° to +50° C), 1000 h -31° to +122° F (-35° to +50° C) -31° to +176° F (-35° to	inlays on rolls. Operating temperature for single tags. -4° to +158° F (-20° to +70° C) -4° to +158° F (-20° to +70° C), 100× 5 min with	(-40° to +90° C), 1000 h -13° to +158° F	(-40° to +90° C), 1000 h -13° to +158° F	(-40° to +90° C), 1000 h -13° to +185° F (-25° to +85° C) -22° to +194° F (-30° to +90° C), 50 x 10 min with	(-40° to +85° C), 1 x 1000 h -40 °to +185° F (-40° to +85° C) -40° to +185° F (-40° +85° C), 100 x 5 min w
Operating Shock/Fatigue	(-40° to +90° C), 1000 h -40° to +185° F (-40° to +85° C) -40° to +212° F (-40° to +100° C), 100× 5 min with 30 sec transition 284° F (140° C), 1 ×	(-35° to +50° C), 1000 h -31° to +122° F (-35° to +50° C) -31° to +176° F (-35° to +80° C), 1000 h 176° F (80° C), 1 × 24 h	inlays on rolls. Operating temperature for single tags. -4° to +158° F (-20° to +70° C) -4° to +158° F (-20° to +70° C), 100× 5 min with 30 sec transition	(-40° to +90° C), 1000 h -13° to +158° F (-25° to +70° C)	(-40° to +90° C), 1000 h -13° to +158° F	(-40° to +90° C), 1000 h -13° to +185° F (-25° to +85° C) -22° to +194° F (-30° to +90° C), 50 x 10 min with 30 sec transition	(-40° to +85° C), 1 x 1000 h -40 °to +185° F (-40° to +85° C) -40° to +185° F (-40° +85° C), 100 x 5 min w
Operating Shock/Fatigue	(-40° to +90° C), 1000 h -40° to +185° F (-40° to +85° C) -40° to +212° F (-40° to +100° C), 100× 5 min with 30 sec transition 284° F (140° C), 1 ×	(-35° to +50° C), 1000 h -31° to +122° F (-35° to +50° C) -31° to +176° F (-35° to +80° C), 1000 h	inlays on rolls. Operating temperature for single tags. -4° to +158° F (-20° to +70° C) -4° to +158° F (-20° to +70° C), 100× 5 min with 30 sec transition 158° F (70° C), 1 × 24 h	(-40° to +90° C), 1000 h -13° to +158° F (-25° to +70° C)	(-40° to +90° C), 1000 h -13° to +158° F	(-40° to +90° C), 1000 h -13° to +185° F (-25° to +85° C) -22° to +194° F (-30° to +90° C), 50 x 10 min with 30 sec transition 266° F (130° C), 100 h	(-40° to +85° C), 1 x 1000 h -40 °to +185° F (-40° to +85° C) -40° to +185° F (-40° +85° C), 100 x 5 min w
Operating Shock/Fatigue Peak	(-40° to +90° C), 1000 h -40° to +185° F (-40° to +85° C) -40° to +212° F (-40° to +100° C), 100× 5 min with 30 sec transition 284° F (140° C), 1 × 24 h ISO 14443A - NFC Tag	(-35° to +50° C), 1000 h -31° to +122° F (-35° to +50° C) -31° to +176° F (-35° to +80° C), 1000 h 176° F (80° C), 1 × 24 h ISO 10373; ISO 7816-1; ISO 10373; ISO 7816-1; ISO 14443A - NFC Tag Type 4	inlays on rolls. Operating temperature for single tags. -4° to +158° F (-20° to +70° C) -4° to +158° F (-20° to +70° C), 100× 5 min with 30 sec transition 158° F (70° C), 1 × 24 h	(-40° to +90° C), 1000 h -13° to +158° F (-25° to +70° C) ER	(-40° to +90° C), 1000 h -13° to +158° F (-25° to +70° C)	(-40° to +90° C), 1000 h -13° to +185° F (-25° to +85° C) -22° to +194° F (-30° to +90° C), 50 x 10 min with 30 sec transition 266° F (130° C), 100 h	(-40° to +85° C), 1 x 1000 h -40 °to +185° F (-40° to +85° C) -40° to +185° F (-40° +85° C), 100 x 5 min w 30 sec transition
Operating Shock/Fatigue Peak Standards	(-40° to +90° C), 1000 h -40° to +185° F (-40° to +85° C) -40° to +212° F (-40° to +100° C), 100× 5 min with 30 sec transition 284° F (140° C), 1 × 24 h ISO 14443A - NFC Tag Type 4 Surface printing;	(-35° to +50° C), 1000 h -31° to +122° F (-35° to +50° C) -31° to +176° F (-35° to +80° C), 1000 h 176° F (80° C), 1 × 24 h ISO 10373; ISO 7816-1; ISO 10373; ISO 7816-1; ISO 104443A - NFC Tag Type 4 laser engraving.	inlays on rolls. Operating temperature for single tags. -4° to +158° F (-20° to +70° C) -4° to +158° F (-20° to +70° C), 100× 5 min with 30 sec transition 158° F (70° C), 1 × 24 h <b>OTH</b>	(-40° to +90° C), 1000 h -13° to +158° F (-25° to +70° C) ER Printed L	(-40° to +90° C), 1000 h -13° to +158° F (-25° to +70° C) ISO 14443A - NFC Tag	(-40° to +90° C), 1000 h -13° to +185° F (-25° to +85° C) -22° to +194° F (-30° to +90° C), 50 x 10 min with 30 sec transition 266° F (130° C), 100 h g Type 4 Alternative chips; custom embossed logo; laser	(-40° to +85° C), 1 x 1000 h -40° to +185° F (-40° to +85° C) -40° to +185° F (-40° +85° C), 100 x 5 min w 30 sec transition Surface printing; lase engraving.
Operating Shock/Fatigue Peak Standards Options	(-40° to +90° C), 1000 h -40° to +185° F (-40° to +85° C) -40° to +212° F (-40° to +100° C), 100× 5 min with 30 sec transition 284° F (140° C), 1 × 24 h ISO 14443A - NFC Tag Type 4 Surface printing;	(-35° to +50° C), 1000 h -31° to +122° F (-35° to +50° C) -31° to +176° F (-35° to +80° C), 1000 h 176° F (80° C), 1 × 24 h ISO 10373; ISO 7816-1; ISO 10373; ISO 7816-1; ISO 104443A - NFC Tag Type 4 laser engraving.	inlays on rolls. Operating temperature for single tags. -4° to +158° F (-20° to +70° C) -4° to +158° F (-20° to +70° C), 100× 5 min with 30 sec transition 158° F (70° C), 1 × 24 h <b>OTH</b>	(-40° to +90° C), 1000 h -13° to +158° F (-25° to +70° C) ER Printed L	(-40° to +90° C), 1000 h -13° to +158° F (-25° to +70° C) ISO 14443A - NFC Tag	(-40° to +90° C), 1000 h -13° to +185° F (-25° to +85° C) -22° to +194° F (-30° to +90° C), 50 x 10 min with 30 sec transition 266° F (130° C), 100 h g Type 4 Alternative chips; custom embossed logo; laser engraved serial number	(-40° to +85° C), 1 x 1000 h -40° to +185° F (-40° to +85° C) -40° to +185° F (-40° t +85° C), 100 x 5 min wi 30 sec transition

Service Options.	Comice Deat Number (new second
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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