

PRODUCT COMPARISON CHART

RAIN® UHF: 860 MHz to 960 MHz

Global EPC Class-1 Generation-2 (C1 G2) UHF RFID protocol for communications.
Compliant with ISO/IEC 18000-6C and other standards.



	DISCS					SPECIALTY														
Product Family	Bin Tag	Epoxy Tag	Embeddable RFID	Brick Tag	High Temperature Label	InLine Tag Plate	InLine Tag Ultra		Iron Tag		ISO Card	Keg Tag	LinTag	Seal Tag vTammer	Seal Tag edTammer	SlimFlex Tag			TapMark Tag	Labels
Sub-family	UHF	UHF	PCB Coin	Ceramic UHF			Standard / Curve	Mini	176	206	UHF	UHF		UHF	UHF	Standard / Mini	Laundry	Square	UHF	UHF
Description	Screw or embed into standard waste collection bins	Thin, rigid, surface-printable rectangle. Can withstand plastic injection molding	Highly robust near-field UHF coin for embedding. Withstands high temperatures, liquids and impact.	Micro-sized transponders for tracking small metal assets	Impermeable, wafer-thin sheets, resistant to high heat and torsion. Shape customizable	Thin, rigid container tags with large surface to accommodate laser engraving or labels	High performance, general purpose transponders. Mount via glue, screw or weld	Small, robust, general purpose transponders	High-temperature and flame resistant tags. Enable tracking of metal assets in harsh environments		Standard ISO cards, configurable to any application requirements, including multiple frequencies	Curved to fit metal kegs and gas cylinders. Mount via glue	Sewn, hemmed or heat-sealed into linens, withstands rigors of 300 commercial laundry cycles	Flexible units with built-in visually tamper evident cable tie	Digitally tamper evident seals report status via RFID when seal is broken	Flexible, rugged transponders deliver versatile mounting options	Sewn into hem of garments, chemicals and high temperatures of up to 200 washing cycles	Designed for wooden pallets. Mounts vertical or flush to a flat surface or extended from a corner	Indoor asset tracking on/off metal tag with a multitude of mounting options incl. sticker, cable tie, screw or magnet	Efficiently tag large quantities of assets to enable powerful RFID applications
Chip type	Higgs 3	Higgs 3	Monza 4E	Higgs 3	Monza 4QT	Monza 3 (EU) Monza 4E (US)	Monza 4QT	Monza R6	Higgs 3	Monza X	Monza 4QT	Monza 4	G2IL	Higgs 3	UCODE G2IM+	Higgs 3			Monza R6	Monza R6
EPC TID	96 bit 64 bit	96 bit 64 bit	496 bit 96 bit	96 bit 64 bit	128 bit 96 bit	496 bit 96 bit	128 bit 96 bit	96 bit 48 bit	96 bit 64 bit	128 bit 96 bit	128 bit 96 bit	496 bit 96 bit	128 bit 64 bit	96 bit 64 bit	256 bit 96 bit	96 bit 64 bit			96 bit	96 bit
User memory up to	512 bit	512 bit	128 bit	512 bit	512 bit	N/A	512 bit		512 bit	8192 bit	512 bit	128 bit	N/A	512 bit	112 bit	512 bit			N/A	N/A
Reading distance up to	6.5 ft (2 m)	26 ft (8 m)	10 in (25 cm)	8 ft (2.5 m)	26 ft (8 m)	25 ft (7.5 m)	26 ft (8 m)	9.8 ft (3 m)	13 ft (4 m)	8 ft (2.5 m)	N/A	21 ft (6.5 m)	10 ft (3 m)	26 ft (8 m)	6.5 ft (2 m)	26 ft (8 m)	16 ft (5 m)	26 ft (8 m)	9.8 ft (3 m)	9.8 ft (3 m)
Other frequencies	LF, HF	LF, HF		LF, HF							LF, HF	LF		HF		HF				HF
Dimensions <i>Refer to datasheets for other available sizes</i>	Ø 1.2 x 0.6 in (30 x 15 mm)	3.3 x 1.0 x 0.04 in (83 x 25 x 1 mm)	0.7 x 0.5 x 0.04 in (19 x 12 x 1 mm)	max. 0.4 x 0.2 x 0.12 in (10 x 5.4 x 3.1 mm)	3.1 x 2.0 x 0.02 in (80 x 50 x 0.5 mm)	4.7 x 2.7 x 0.2 in (120 x 68 x 4 mm)	3.8 x 1.0 x 0.6 in (97 x 27 x 15 mm)	2.4 x 0.7 x 0.3 in (60 x 18 x 8 mm)	2.0 x 0.9 x 0.3 in (53 x 23 x 7 mm)	1.3 x 1.2 x 0.24 in (33.7 x 31.1 x 6.1 mm)	3.4 x 2.1 x 0.03 in (85.6 x 53.98 x 0.8 mm)	1.3 x 1.6 x 0.4 in (33 x 40 x 9 mm); 3.0 in (75 mm) curve radius	max. 2.0 x 0.9 x 0.04 in (50 x 22 x 1 mm)	3.3 x 1.0 x 0.1 in (85 x 25 x 3 mm); cable tie 15.0 x 0.2 x 0.1 in (380 x 6 x 2 mm)	153 x 0.55 x 0.14 in (39 x 14 x 36 mm); cable tie 307 x 0.55 x 0.14 in (78 x 14 x 36 mm)	max. 3.4 x 1.0 x 0.1 in (87 x 25 x 3 mm)	2.1 x 0.5 x 0.1 in (55 x 12 x 2 mm)	3.3 x 4.5 x 0.1 in (85 x 115 x 3 mm)	1.5 x 0.5 x 0.2 in (38 x 13 x 4.5 mm)	0.71 x 0.169 in (18 x 43 mm)
Mount on metal				Yes		Yes	Yes	Yes	Yes		Yes	Yes							Yes	Yes
Moisture resistance	IP67	IP68, IP69K	IP68	IP67	IP68	IP68, IP69K	IP68, IP69K	IP68, IP69K	IP68, IP69K	IP67	IP68	IP68, IP69K	IP67	IP68			IP68		IP67	IP67
Food compatible									Yes											
Operating temperature	-40° to +158° F (-40 to +70° C)	-40° to +185° F (-40 to +85° C)	-40° to +185° F (-40 to +85° C)	-40° to +185° F (-40 to +85° C)	-40° to +185° F (-40 to +85° C)	-40° to +185° F (-40 to +85° C)	-40° to +185° F (-40 to +85° C)	-40° to +185° F (-40 to +85° C)	-40° to +185° F (-40 to +85° C)	-40° to +158° F (-40 to +70° C)	-40° to +176° F (-40 to +80° C)	-40° to +185° F (-40 to +85° C)	-40° to +158° F (-40 to +70° C)	-40° to +158° F (-40 to +70° C)	-40° to +158° F (-40 to +70° C)		-40° to +158° F (-40 to +70° C)		-40° to +158° F (-40 to +70° C)	-40° to +185° F (-40 to +85° C)
Peak temperature	194° F (90° C)	320° F (160° C)	428° F (220° C)	302° F (150° C)	446° F (230° C)	185° F (85° C)	185° F (85° C)	356° F (180° C)	428° F (220° C)	176° F (80° C)	185° F (85° C)	392° F (200° C)	158° F (70° C)	158° F (70° C)	158° F (70° C)	158° F (70° C)	428° F (220° C)	230° F (110° C)	302° F (150° C)	185° F (85° C)
Flame resistant					Yes			Yes						Yes						
Standards <i>Compliant with EPC C1 G2, ISO 18000-6C and others listed</i>	DIN 30745					IEC 62262-IK06 ISO 17364	DIN 40050-9 IEC 62262-IK09 to IK07 ISO 17364	ATA Spec 2000 DIN 40050-9 IEC 62262-IK07 GS1 EPC TDS 1.6 SAE AS5678	ISO 10373 ISO 7816-1	IEC 62262-IK08 ISO 17364	IEC 62262-IK06	IEC 62262-IK06	ATA Spec 2000 DIN 40050-9 GS1 EPC TDS 1.6 SAE AS5678		IEC 62262-IK06					

A tag for every application

HID can create a custom tag solution to fit your application requirements for chip type, dimensions, programming and materials. You can even embed multiple technologies in a single RFID tag, providing transition paths that connect legacy systems with new roll-outs.

A comprehensive reference of RFID tag variations can be found at www.rfid.com

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PRODUCT COMPARISON CHART

HF: 13.56 MHz / ISO 15693 / NFC*

Compliant with ISO/IEC 18000-3 and other standards.



	DISCS					EMBEDDABLE					SPECIALTY			
Product Family	Bin Tag	IN Tag™		LogiTag®		Poly Tag™	Brick Tag	Embeddable RFID	Glass Tag		Inlays & Labels	Seal Tag	SlimFlex™ Tag	
Sub-family	HF	HF		081/121	161/162	HF	Vigo	Piccolino	Vigo	ICODE SLIX	Wet Inlay	HF	HF 200	
Description	Screw or embed into standard waste collection bins	Ruggedized discs for severe industrial environments		Small, thin discs with high chemical and pressure resistance. Optional button format		Extreme-impact resistant discs	Micro-sized transponders for embedding into assets	Tiny, water resistant embeddable RFID disc	Compact embeddable capsules, resistant to long term immersion into water or chemicals		Small, thin, translucent self-adhesive; hide discretely behind print media or inside product packaging.	Visually or electrically tamper evident RFID seals	Flexible, rugged transponders deliver versatile mounting options	
Chip type	ICODE SLIX	ICODE SLIX	F-Mem	Vigo	ICODE SLIX	ICODE SLIX	Vigo	ICODE SLIX, Vigo, F-Mem	Vigo	ICODE SLIX	ICODE SLIX	ICODE SLIX		
User memory up to	896 bit	896 bit	8 Kbyte	2048 bit	896 bit	896 bit	1024 bit	16 Kbit	1664 bit	896 bit	112 byte	896 bit		
Reading distance up to	Dependent upon reader, environment and application						Dependent upon reader, environment and application						Dependent upon reader, environment and application	
Other frequencies	LF, UHF	LF, UHF		LF		LF	LF, UHF		LF			UHF		
Dimensions <i>Refer to datasheets for other available sizes</i>	Ø 1.2 x 0.6 in (30 x 15 mm)	Ø 0.8 to 2.2 in (20 to 55 mm) Thickness 0.1 to 0.5 in (3 to 13 mm)		Ø 0.5 x 0.1 in (8/12 x 2 mm)	Ø 0.6 x 0.1 in (16 x 3 mm)	Ø 1.34 x 0.31 in (Ø 34 x 8 mm)	0.4 x 0.1 x 0.1 in (10 x 3.0 x 2.6 mm)	Ø 0.23 - 0.37 in (6 - 9.5 mm)	Ø 0.1 x 0.5 in (Ø 2 x 12 mm)	Ø 0.2 x 0.9 in (Ø 4 x 22 mm)	18x57 mm (ICODE SLIX)	3.3 x 1.0 x 0.1 in (85 x 25 x 3 mm); cable tie 15.0 x 0.2 x 0.1 in (380 x 6 x 2 mm)	max. 3.4 x 1.0 x 0.1 in (87 x 25 x 3 mm) (6 mm on metal)	
Mount on metal		Yes		Yes								Some models		
Moisture resistance	IP67	IP68, IP69K		IP68		IP67		IP67	IP68		IP67	IP68		
Food compatible		Yes							Yes					
Operating temperature	-40° to +158° F (-40 to +70° C)	-4° to +185° F (-20 to +85° C)		-40° to +194° F (-40° to +90° C)	-13° to 185° F (-25° to +85° C)	-13° to +185° F (-25° to +85° C)	-13° to +158° F (-25° to +70° C)	-40° to +185° F (-40° to 85° C)	-13° to +185° F (-25° to +85° C)		-4° to +158° F (-20° to +70° C)	-40° to +158° F (-40 to +70° C)		
Peak temperature	194° F (90° C)	284° F (140° C)		194° F (90° C)	248° F (120° C)	266° F (130° C)			284° F (140° C)		257° F (125° C)	212° F (100° C)		
Flame resistant		Yes							Yes					
Standards <i>Compliant with ISO 18000-3 and others listed</i>	DIN 30745 ISO 15693 NFC Tag Type 5	ATEX EN 60079-0:2009 EN 60079-11:2007 EN 60079-26:2007 ISO 15693 NFC Tag Type 5		ATEX EN 60079-0:2009 EN 60079-11:2007 EN 60079-26:2007 ISO 15693 NFC Tag Type 5		ISO 15693 NFC Tag Type 5	ISO 15693 NFC Tag Type 5	ISO 15693 NFC Tag Type 5	ATEX EN 60079-0:2009 EN 60079-11:2007 EN 60079-26:2007 ISO 15693 NFC Tag Type 5		ISO/IEC 15693 NFC Tag Type 5	ISO 15693 NFC Tag Type 5		

* To be NFC Forum Tag Type compliant, tags need to be formatted with an NDEF data structure. Tag Type 2 and 4 are supported by all known NFC devices. NFC-V Tag Type 5 (Vicinity - ISO 15693) has been officially standardized by NFC Forum in June 2015 and may not be supported by some older NFC devices. Android and Windows 10 Phone typically support tag type 5.



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2017-03-13-hid-rfid-ll-frequency-hf-tags-ct-en PLT-02376

PRODUCT COMPARISON CHART

HF: 13.56 MHz / ISO 14443 / NFC*
 Compliant with ISO/IEC 18000-3 and other standards.

	DISCS	EMBEDDABLE		SPECIALTY		
Product Family	Embeddable RFID	Inlays & Labels		Epoxy Keyfob	ID Band	ISO Card
Sub-family	Clear Disc	Paper Label	Wet Inlay		MIFARE	MIFARE
Description	Transparent coating resists chemical exposure, shock, vibration and thermal fluctuations	Custom-imprintable labels to integrate digital touch points onto physical media	Small, thin, translucent self-adhesive; hide discretely behind print media or inside product packaging.	Customer-friendly form keeps credentials at hand; withstands rigors of daily transport in pockets or purses	Wrist band for high-moisture environs such as water parks, pools, saunas and wellness areas	Standard dimension cards enable access control, cashless payment and related applications
Chip type	MIFARE DESFire EV1/EV2	NTAG 213	NTAG 213, HID Trusted Tag	MIFARE EV1 1K, HID Trusted Tag	MIFARE DESFire EV1	MIFARE DESFire EV1/EV2, HID Trusted Tag
User memory up to	4 KB	144 byte	144 byte, 8KB	8 KB	8 KB	8 KB
Reading distance up to	Near tap	Near tap		Near tap		
Other frequencies	LF			LF	LF	LF, UHF
Dimensions <i>Refer to datasheets for other available sizes</i>	Ø 0.98 in (25 mm)	Ø 0.9 in (23 mm), Ø 1.1 in (29 mm) or Ø 1.6 in (40 mm)		1.2 x 1.8 x 0.06 in (30 x 45 x 1.6 mm)	Strap: 9.5 x 0.6 x 0.05 in (241 x 16 x 1.5 mm); Housing: Ø 1.0 x 0.2 in (25 x 4.4 mm)	ISO card 3.4 x 2.1 x 0.03 in (85.6 x 54 x 0.84 mm); sticker 1.9 x 1.0 in (48 x 25 mm)
Mount on metal						
Moisture resistance	IP67	IP67		IP67	IP68	IP68
Food compatible						
Operating temperature	-4° to +140° F (-20° to +60° C)	-4° to +158° F (-20° to +70° C)		-13° to +176° F (-25° to +80° C)	-13° to +140° F (-25° to +50° C)	-31° to +122° F (-35° to +50° C)
Peak temperature	194° F (90° C)	257° F (125° C)		284° F (140° C)	212° F (100° C)	176° F (80° C)
Flame resistant						
Standards <i>Compliant with ISO 18000-3, ISO 14443A and others listed</i>	ISO 14443 NFC Tag Type 4	ISO 14443 NFC Tag Type 2 (NTAG 213) NFC Tag Type 4 (Trusted Tag)		ISO 14443 NFC Tag Type 4	ISO 14443 NFC Tag Type 4	ISO 14443 NFC Tag Type 4 ISO 10373 ISO 7816-1

* To be NFC Forum Tag Type compliant, tags need to be formatted with an NDEF data structure. The above listed Tag Types 2 and 4 are supported by all known NFC devices. NFC-V Tag Type 5 (ISO 15693) has been officially standardized by NFC Forum in June 2015 and may not be supported by some older NFC devices. These tags can be found on the HF / ISO 15693 Tag comparison chart. Android and Windows 10 Phone typically support tag type 5.



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Enhanced security potential with HID Trusted Tag[®] Services

Tags equipped with HID Trusted Tag integrated chips are uniquely programmed to enhance security and efficiency when deployed with HID Trusted Tag[®] Services. Our cloud-based NFC authentication platform adds unique identities to everyday objects enabling more secure, efficient transactions. Simply tap an embedded or attached HID Trusted Tag with any NFC device. Trusted Tag Services deliver a frictionless authentication experience for "proof-of-presence" applications, including time-and-attendance, brand protection, promotional marketing and Internet of Things programs.

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2017-03-13-hid-rfid-ii-frequency-nfc-tags-ct-en PLT-02376

PRODUCT COMPARISON CHART

LF: 125 or 134.2 kHz

	DISCS									EMBEDDABLE				
Product Family	Bin Tag	Epoxy Tag	IN Tag™	identiFUEL™ Vehicle Tags	LogiTag®		Poly Tag™	Volcano Tag	World Tag®	Brick Tag	Embeddable RFID	Glass Tag	Nail Tag	Plug Tag
Sub-family	LF	LF	LF		120	160	LF			HDX, Nova	LF	LF		
Description	Screw or embed into standard waste collection bins	Thin, rigid, discs can withstand plastic injection molding	Ruggedized discs for severe industrial environments	Small, tamper proof tags for unique identification of vehicles towards Fuel Management Systems (FMS)	Small, thin discs with high chemical and pressure resistance		Extreme-impact resistant discs	For high temperature environments	Cost-effective, general use indoor asset tags	Micro-sized transponders for embedding into assets	Ring and rod shaped chips and antennas for customized enclosures	Compact capsules, resistant to long term immersion. Embeddable into metal or plastic	Glass-fiber nails pound into wood and pallets	Plastic inserts for permanent mounting to waste and other containers
Chip type	Unique; FDX-b BDE; HDX BDE	HITAG S; Unique	HITAG S; Unique	HITAG S	HITAG S; Q5; Unique	Unique	HITAG S; Unique	Q5; Unique	HITAG S; Q5; Titan; Unique	HDX, Nova	EM4305, HDX, HITAG-S, Q5, Unique	EM4305, HDX, HITAG-S, Q5, Unique	Unique	Unique; FDX-b
User memory up to	128 bit	2048 bit	2048 bit	256 bit	2048 bit	64 bit	2048 bit	264 bit	2048 bit	160 bit	2048 bit	2048 bit	64 bit	128 bit
Reading distance up to	Dependent upon reader, environment and application									Dependent upon reader, environment and application				
Other frequencies	HF, UHF	UHF	HF, UHF		HF		HF			HF, UHF	HF	HF		
Dimensions <i>Refer to datasheets for other available sizes</i>	Ø 1.2 x 0.6 in (30 x 15 mm)	Ø 0.8 or 1.18 x 0.04 in (20 or 30 x 1 mm)	Ø 0.8 to 2.0 in (20 to 50 mm); thickness 0.1 in (3 mm)	0.98 x 1.0 x 0.44 in (25 x 25.8 x 11.2 mm)	Ø 0.5 x 0.1 in (12 x 2 mm)	Ø 0.6 x 0.1 in (16 x 3 mm)	Ø 1.34 x 0.31 in (Ø 34 x 8 mm)	Ø 1.0 x 0.2 in (26 x 4 mm)	Ø 0.8 to 2.0 in (20 to 50 mm); thickness 0.1 in (2 mm)	0.5 x 0.2 x 0.1 in (12 x 6 x 3 mm)	Multiple	Ø 0.06 to 0.2 in (1.4 to 4 mm); length 0.3 to 0.9 in (8 to 23 mm)	Ø 0.16 x 1.40 in (4 x 35.5 mm)	Ø 0.35 x 0.75 in (9 x 19 mm); cap Ø 0.6 in (15 mm)
Mount on metal	Yes									Yes				
Moisture resistance	IP67	IP67	IP68, IP69K	IP67	IP68		IP67	IP68		IP68	Customize to meet requirements	IP68	IP67	IP68
Food compatible			Yes											
Operating temperature	-40° to +158° F (-40 to +70° C)	-40° to +185° F (-40° to +85° C)	-40° to +194° F (-40° to +90° C)	-13° to +140° F (-25° to +60° C)	-13° to 185° F (-25° to +85° C)		-13° to +185° F (-25° to +85° C)	-13° to +185° F (-25° to +85° C)	-13° to +158° F (-25° to +70° C)	-40° to +194° F (-40° to +90° C)	Customize to meet requirements	-40° to +185° F (-40° to +85° C)	-13° to +185° F (-25° to +85° C)	-13° to +185° F (-25° to +85° C)
Peak temperature	194° F (90° C)	284° F (140° C)	284° F (140° C)		320° F (160° C)		266° F (130° C)	392° F (+200° C)	266° F (130° C)	284° F (140° C)			284° F (140° C)	
Flame resistant			Yes									Yes		
Standards <i>Compliant with standards and others listed</i>	DIN 30745 EN 14803		ATEX EN 60079-0:2009 EN 60079-11:2007 EN 60079-26:2007	ATEX EN 60079-0:2009 EN 60079-11:2007 EN 60079-26:2007	ATEX EN 60079-0:2009 EN 60079-11:2007 EN 60079-26:2007							ATEX EN 60079-0:2009 EN 60079-11:2007 EN 60079-26:2007		EN 14803

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