Waste Management

Product Name	Bin Tag	Bin Tag HDX	Bin Tag HF	Bin Tag UHF	Plug Tag	InLine Ultra Standard	InLine Ultra Slim (Weld)	InLine Ultra Pro (weld)	InLine Ultra Mini	IN Tag 200/300/500
Application	For integration into waste management collection bins during or after molding				Easy-mounting, non-removable tag for tracking containers for hazardous, recycling, medical and sensitive waste	Robust high performance, general purpose UHF transponder for metal and non metal outdoor use				Ruggedized for severe industrial environments, food compatible
Frequency	125 kHz / 134.2 kHz	134.2 kHz	13.56 MHz	860-960 MHz (Worldwide)	131 kHz / 134.2 kHz	860 - 960 MHz (Worldwide)				125 kHz / 13.56 MHz
Size	Ø30x15 mm				Ø9x19mm (Cap Ø15x19 mm)	97 × 27 × 15 mm	97 × 27 × 10 mm; Weld : 105 × 35 × 10 mm	97 × 27 × 15 mm; Weld : 105 × 35 × 15 mm	60 × 18 × 8 mm	Ø20 or 30x2.5 mm, Ø50x3 mm
Screw hole	N/A		Ø5.5 mm	N/A	N/A	Ø5.2 mm or optional steel ring to weld			Ø4.5 mm	None (IN Tag 200) or Ø5.2mm
Standards / Protocol Support	DIN30745	EN 14803, DIN 30745	ISO 15693, ISO 18000-3	EPC C1G2, ISO 18000-6C, DIN30745	N/A / EN 14803	UHF EPC Class 1 Gen 2, ISO 18000-6C, ISO 17364, DIN 40050-9				EN 60079-0:2009; EN 60079-11:2007; EN 60079-26:2007; ISO 15693, ISO 18000-3 / EN 60079-0:2009, EN 60079-11:2007, EN 60079-26:2007
Chip Type	Unique / FDX-b BDE	HDX BDE	ICODE SLIX	Higgs 3	Unique / FDX-b BDE	Monza 4QT			Monza R6	HITAG S, Unique / ICODE SLIX 2, F-Mem
Memory [2]	64 bit RO / 128 bit RO	128 bit RO	1024 bit RW	96 bit EPC, 64 bit TID, 512 bit RW	64 bit RO / 128 bit RO	96 bit TID, 128 bit EPC, 512 bit RW			96 bit EPC, 48 bit TID	256 bit RW, 2048 bit RW, 64 bit RO / 2560 bit RW, 2 Kbyte FRAM, 8 Kbyte FRAM (IN Tag 300)
Anti-collision	N/A	N/A	Yes		N/A	Yes				HITAG S - Yes / Yes
Reading Distance [1]	N/A	N/A	N/A	Up to 6.5ft / 2m	N/A	Up to 26.2 ft (8 m)	Up to 16.4 ft (5 m)	Up to 22.9 ft (7 m)	up to 9.8 ft (3 m)	N/A
Typical Use Environment	Plastic				Plastic	Metal, Plastic, Wood, Glass				Plastic, Wood, Glass, Metal (OM)
Mounting Method	Screw-in			N/A	Plug-in	Screw-on or weld				Embed, glue or screw-on
Operating Temperature [1]	-40 °C to +85 °C	-25 °C to +70 °C	-25 °C to +85°C	-40 °C to +70 °C	-20 °C to +85 °C	-40°C to +85°C			-25°C to +85°C	-40°C to +85°C, -25 to +85° C (F-Mem)
Storage Temperature [1]	-40 °C to +90 °C	-40 °C to +85 °C	-40°C to +90°C	-40 °C to +70 °C	-20 °C to +85 °C	-40°C to +85°C				-40°C to +90°C
Peak Temperature [1]	N/A	N/A	N/A	N/A	N/A	Shock -40° to +85°				+140°C (100h)
Housing Material	Housing PA6, potting - PUR				PA6	PC-ABS				PPA Polyphthalamide
Chemical and Environmental Resistances [1]	Water, IP67 (1m, 1 h), salt mist, fuel B, petroleum, mineral and vegetable oils				Water, IP 68 (1m, 24 h)	Water, IP69K (100 bar at 80°C, 30 sek., 16 l/min), Salt Mist, Petroleum, Oils, Humidity 70°/80%				Water, IP69K (100 bar at 80°C, 30 sek., 16 l/min), Salt mist, Fuel B, Petroleum, Mineral and vegetable oils, Food compatible, Flame resistant UL94 HB
Mechanical Resistances [1]	Vibration IEC 68.2.6, shock IEC 68.2.29, compression 1000N				Vibration IEC 68.2.6, shock IEC 68.2.29	Vibration IEC 68.2.6, Shock IEC 68.2.29, Impact IEC 62262-IK09		+ Caustic Soda (5%)	Vibration IEC 68.2.6, Shock IEC 68.2.29, Impact IEC 62262-IK07	Vibration IEC 68.2.6, Shock IEC 68.2.29
Axial / Radial Force [1]	1000N (10 sec)				N/A	1000N				800N / 500N (10 sec)
Warranty [4]	7 years				7 years	2 years				2 years

* For further specification details, please see datasheets of the respective products.
Read range is strongly dependent upon multiple parameters including reader, environment and application. HID Global tags are tested and proven to be at the top of their class.
*1) Unique (64 bit RO), Q5 (264 bit RW), Hitag S (32 bit RO, 256 bit RW, 2048 bit RW), I-Code SLIx (1024 bit EEPROM, incl. 896 bit user memory)
*4) Warranty: Storage condition must not exceed specification for temperature, chemical, mechanical, electrical condition, storage from -25°C to + 50°C, humidity 20% to 80%

FINDING WHAT YOU NEED

HID Global has many more products to offer than fit on this page. Please refer to **hidglobal.com/rfid** or contact an HID representative for further assistance in evaluating these tags or selecting a solution that best fits your particular requirements.

FINDING WHAT YOU NEED:

HID Global is has many more products to offer than fits on this page. Please refer to hidglobal.com or contact an HID representative for further assistance in evaluating these tags or selecting a solution that best fits your particular requirements.

COMPARISON CHART

hidglobal.com

Animal Identification

ANIMAL IDENTIFICATION

	Glass Tag Ultra¹	Glass Tags¹							E-Unit Rod	E-Unit Disc	E-Unit Packaged	Ear Tag
Product Name	Glass Tag Ultra¹	Glass Tags¹							E-Unit Rod	E-Unit Disc	E-Unit Packaged	Ear Tag
Application	Glass tube with up to 35% better read range than standard tube of same size	Small size with high chemical resistance provides an ideal solution for injection and long term immersion							Embeddable RFID tags - designed for customized enclosure			Reusable RAIN RFID management ear tag for cattle or industrial applications
Size	Ø2x9 mm, Ø2x12.5 mm	1.4x8 mm	1.4x10 mm	Ø2x12 mm	Ø3x15 mm	Ø3.85x22.5 mm, Ø3.85x32 mm	Ø4x22 mm	Ø4x34 mm	1.55 x 9 mm, 1.8 x 15 mm or 3.8 x 15 mm	Ø 20, 24 mm or custom	Ø 17.4 or 29 mm	116 × 77 × 1.7 mm
Frequency	134.2 kHz	134.2 kHz							134.2 kHz			860 MHz to 960 MHz
Standards / Protocol Support	ISO 11784, ISO 11785	ISO 11784, ISO 11785							ISO 11784, ISO 11785			IEC 62262-IK08, EPC Gen2, ISO/IEC 18000-6C
Chip Type	EM4305	HITAG S, EM4305			HITAG S	HDX	HITAG S, EM4305		HITAG S, EM4305, HDX	EM 4305, HDX		Monza M5/M7
Memory	512 bit RW	256 bit RW, 512 bit RW, 2048 bit RW			256 bit RW	128 bit OTP	256 bit RW, 512 bit RW		256 bit RW, 512 bit RW, 128 bit OTP	512 bit RW, 128 bit OTP		128 bit
Tagging Method	Subcutaneous				Subcutaneous	External housing		External housing e.g. ceramic bolus (stomach)	Ear tag or custom application			Ear Tag
Operating Temperature	-25 °C to +85 °C								-25 °C to + 60 °C			-40 to +85° C
Storage Temperature	-40 °C to +90 °C								-40 °C to + 60 °C			-40 to +85° C
Housing Material	BIO Glass											Thermoplastics Polyurethane (TPU)
Chemical and Environmental Resistances	Water, IP68 (1m, 24h), saltwater, alcohol, HCL, fuel, ammonia								Resist on injection process			Mineral oil, Petroleum, Salt mist, UV light
Parylene Coating Available (better tissue adhaesion)	Yes				Yes	No						
Warranty²	2 years								2 years			2 Years

For further specification details, please see datasheets of the respective products.
1 Optionally available with on-demand custom programming, see http://www.hidglobal.com/main/services/on-demand/pet-programming/

2 Warranty: Storage condition must not exceed specification for temperature, chemical, mechanical, electrical condition, storage from -25°C to + 50°C, humidity 20% to 80%

For unpackaged tags: Warranty would depend on finished product and can only be given as long as raw product is not processed / packaged

COMPARISON CHART

FINDING WHAT YOU NEED:

HID Global is has many more products to offer than fits on this page. Please refer to hidglobal.com or contact an HID representative for further assistance in evaluating these tags or selecting a solution that best fits your particular requirements.

hidglobal.com

HID

Automation & Manufacturing

AUTOMATION

Product Name	IN Tag 200/300/500 (OM)				Logi Tag 121 OM	Poly Tag 340			Volcano Tag 231	Iron Tag 176	Iron Tag 206	Iron Tag 206F	High-Temp. Label	BEEKs™ Industrial v2	BEEKs™ CM v2
Application	Ruggedized for severe industrial environments, food compatible				Micro-sized and thin, high performance HF disc tag with on-metal option	Durable tag for outdoor use requiring extreme impact resistance			Tag to withstand high temperatures	On-metal, High Temperature UHF Tag			High-temperature UHF label for manufacturing processes	BLE Beacons for Condition Monitoring, and Status/Process Monitoring for Industrial Applications	
Frequency	125 kHz	13.56 MHz		865 MHz (EU) 915 MHz (US)	13.56 MHz	125 kHz		13.56 MHz	125 kHz	865 MHz (EU) / 915 MHz (US)			860-960 MHz (Worldwide)	Bluetooth Low Energy (BLE) 4.2	
Size	Ø20, 30 or 50x3 mm	Ø20, 30 or Ø50x3 mm (OM Ø 55 x 13 mm)	Ø20 or 30x3 mm	Ø50x3 mm or Ø55x13 mm	Vigo, ICODE SLIX	Ø34x8 mm			Ø26x4 mm	53x23x7 mm	34x31x6 mm	31x31x6.9 mm	80x50x0.5 mm	60 × 21 x 25 mm	
Screw Hole	None (IN Tag 200) or Ø5.2mm				N/A	Ø5.4 mm			Ø4.5 mm	N/A	Ø3.3 mm		Ø5 mm		
Standards / Protocol Support [1]	ISO 15693, ISO 18000-3		ISO 15693	EPC C1G2, ISO 18000-6C, ATEX	ISO 15693, ISO 18000-3, ATEX		ISO 15693, ISO 18000-3, NFC Type 5, ATEX	ISO/IEC 14443A, NFC Forum Tag Type 2	N/A	EPC C1G2, ISO 18000-6C, DIN 40050-9, ISO 4892-2			EPC C1G2, ISO 18000-6C	FCC / CE / JRF / IC / ATEX	
Chip Type	HITAG S, Unique	ICODE SLIX[2]	F-Mem	G2IM	Vigo, ICODE SLIX	Unique	ICODE SLIX2	NTAG 216	Unique, Q5	Higgs 3	Monza X		Monza 4QT	BLE	
Memory [3]	64 bit RO, 256 bit RW, 2048 bit RW	2560 bit RW	2 KByte RW, 8 KByte RW (IN Tag 300 only)	640 bit EEPROM (96 bit TID, 256 bit EPC)	1024 or 2048 bit, 896 bit UM	64 bit RO	2560 bit UM	888 Bytes UM	64 bit RO, 264 bit RW	64 bit TID, 96 bit EPC, 512 bit RW	96 bit TID, 128 bit EPC, 2176 or 8192 bit RW		96 bit TID, 128 bit EPC, 512 bit RW	N/A	
Anti-collision	HITAG S - Yes	Yes			Yes	Yes			No	Yes			Yes	Yes	
Reading Distance [1]				up to 9.8 ft (3 m)	N/A	N/A			N/A	Up to 13.1 ft (4 m)	up to 8.2 ft (2.5 m)	up to 6.6 ft (2 m)	up to 26.3 ft (8 m)	up to 164 ft (50 m)	
Typical Use Environment	Plastic, Wood, Glass (OM: Metal)				Metal, Plastic, Wood, Glass	Plastic, Metal (OM)	Plastic, Wood, Glass, Metal		Any to withstand equal temperatures	Metal			manufacturing	Motorized equipment	
Mounting Method	Embed, glue or screw-on				embed, glue, sew	Screw-on			Screw-on	Glue or sticker	Screw, clamp, glue or sticker		screw, rivet	3M VHB adhesive sticker (included)	Epoxy glue
Operating Temperature [1]	-25°C to +85°C	-40°C to +85°C		-20°C to +85°C	-40°C to +90°C	-40°C to +85°C (ATEX: -40° to +80° C)		-25° to +70° C	-25 °C to +85 °C	-40°C to +85°C			-40°C to +85°C	-25° to +85° C	
Storage Temperature [1]	-40 °C to +90 °C				-40°C to +90°C	-40 °C to +90 °C		-40 °C to +90°C	-25 °C to +140 °C	-40°C to +90°C			-40°C to +85°C	-30° to +85° C	
Peak Temperature [1]	+140 °C (100h)					+100 °C (100h)			+160 °C (100h) +200 °C (10min)	+180°C (400h)	+180° C (600h), +200° C (24h), +220° C (10h)	+100° C (1000 h)	+140°C (400h), +180°C (100h), +230°C (20h)		
Housing Material	PPA Polyphthalamide				PPS	PA6			PPA	PPA	PPS		Aramid Polymer	Polycarbonate and ABS	
Chemical and Environmental Resistances [1]	Water, IP69K (100 bar at 80°C, 30 sek., 16 l/min), salt mist, fuel B, petroleum, mineral and vegetable oils, food compatible, flame resistant UL94 HB				Water, IP68 (1m, 24h), Salt mist, Fuel B, Petroleum, Mineral and vegetable oils, Food compatible	Water,IP69K, IP68 (1m, 24h), Water with salt, Unleaded gasoline, Petroleum, Mineral and vegetable oils, Humidity 90% HR @ 90 °C			Water, IP68 (1m, 24h)	Water, IP69K (100 bar at 80°C, 30 sek., 16 l/min), salt mist, fuel B, mineral and vegetable oils, petroleum, food compatible, flame (UL94HB) and UV resistant	Water, IP67 (1m, 1h), Salt mist, Fuel B, Mineral and vegetable oils, Petroleum, Flame (UL94V0) and UV resistant	IP68, 68" F (20° C), 3.3 ft (1 m) × 24 h; IP69K (100 bar at 80°C, 30 sek., 16 l/min)	Water, IP68 (1m, 24h), Salt mist, Fuel B, Petroleum, Mineral and vegetable oils, Flame resistant UL 94V-0	Water and UV resistant, IP65	Water and UV resistant, IP67, 68" F (20° C), 3.3 ft (1 m) x 1 h
Mechanical Resistances [1]	Vibration IEC 68.2.6, shock IEC 68.2.29				Vibration IEC 68.2.6, Shock IEC 68.2.29	Vibration IEC 68.2.6, shock IEC 68.2.29			Vibration IEC 68.2.6, shock IEC 68.2.29	Vibration IEC 68.2.6, Shock IEC 68.2.29, Impact IEC 62262-IK07			Vibration IEC 68.2.6, Shock IEC 68.2.29, Bending		
Axial / Radial Force [1]	800N / 500N (10 sec)				800N / 500N (10 sec)	800N / 500N (10 sec)			N/A	800N / 500N (10 sec)			50N		
Warranty [4]	2 years				2 years	2 years			2 years	2 years				1 Year	

* For further specification details, please see datasheets of the respective products.
  Read range is strongly dependent upon multiple parameters including reader, environment and application. HID Global tags are tested and proven to be at the top of their class.
*1) ISO 11784, ISO 11785 for Hitag S and EM4305 chip only

*2) Unique (64 bit RO), Q5 (264 bit RW), Hitag S (32 bit RO, 256 bit RW, 2048 bit RW), Titan (1024 bit RW), EM4305 (512 bit RW) ICODE SLIX (1024 bit EEPROM, incl. 896 bit user memory), ICODE SLIX2 (2560 bit user memory). NTAG 216 (888 byte RW)
*4) Warranty: Storage condition must not exceed specification for temperature, chemical, mechanical, electrical condition, storage from -25°C to + 50°C, humidity 20% to 80%

FINDING WHAT YOU NEED

HID Global has many more products to offer than fit on this page. Please refer to **hidglobal.com/rfid** or contact an HID representative for further assistance in evaluating these tags or selecting a solution that best fits your particular requirements.

FINDING WHAT YOU NEED:
HID Global is has many more products to offer than fits on this page. Please refer to hidglobal.com or contact an HID representative for further assistance in evaluating these tags or selecting a solution that best fits your particular requirements.

COMPARISON CHART

hidglobal.com

Returnable Transport Items

	SlimFlex Tag	InLine Tag Plate	InLine Tag Plate Asset Tag	Keg Tag UHF		Nail Tag	IN Tag 200/300/500 (OM)			
Application	Flexible, robust UHF tag. May be laser engraved with human readable information or barcode	Thin, rigid UHF tag for container tagging with room for inscriptions via Laser engraving or labels		Robust high performance transponder for curved metallic returnable transport items like beer kegs, gas cylinders etc.		Glass-fiber nail tag for easy insertion into wood for use in pallet identification	Ruggedized for severe industrial environments, food compatible			
Frequency	860-960 MHz (Worldwide)	865 MHz (EU) / 915 MHz (US) on-metal, broadband off-metal	13.56 MHz	865-956 MHz (Worldwide)		125 kHz	125 kHz	13.56 MHz		865 MHz (EU) / 915 MHz (US)
Size	83×25×3 mm and others	120x68x3.7 mm	30×65x3.5 mm	52x26.5x21.4 mm	88x37x15 mm	Ø4x35.5 mm	Ø20, 30 or 50x3 mm	Ø20, 30 or Ø50x3 mm (OM Ø 55 x 13 mm)	Ø20 or 30x3 mm	Ø50x3 mm or Ø55x13 mm
Screw hole	various	Ø4.2 mm	Ø12 mm	Curve radius: 126/163 mm	Curve radius: 450 mm	N/A	None (IN Tag 200) or Ø5.2mm			
Standards / Protocol Support	ISO 18000-6C, EPC C1G2, ISO 17364		ISO 14443A - NFC Tag Type 4	ISO 18000-6C, EPC C1G2, ISO 17364, DIN 40050-9			ATEX	ISO 15693, ISO 18000-3, ATEX	ISO 15693, ATEX	EPC C1G2, ISO 18000-6C, ATEX
Chip type	Higgs 3, Monza R6-P	Monza 4E	HID Trusted Tag	Monza R6	Monza 4QT	Unique	HITAG S, Unique	ICODE SLIX (2)	F-Mem	G2IM
Memory³	64 bit TID, 96 bit EPC, 512 bit RW - 128/96 bit EPC, 32/64 bit UM	496 bit EPC, 96 bit TID, 128 bit RW	8 KB	96 bit EPC, 48 bit TID	128 bit EPC, 96 bit TID, 512 bit RW	64 bit RO	64 bit RO, 256 bit RW, 2048 bit RW	1024 bit RW 2560 bit RW	2 KByte RW, 8 KByte RW (IN Tag 300 only)	640 bit EEPROM (96 bit TID, 256 bit EPC)
Anti-collision	Yes			Yes		N/A	HITAG S - Yes	Yes		
Reading distance²	Up to 19.7 ft (6 m)	up to 20 ft (6 m) on-metal, up to 26 ft (8 m) off-metal		up to 29.5 ft (9 m)	up to 26.2 ft (8 m)	N/A				up to 9.8 ft (3 m)
Typical use environment	Plastic, Wood, Any materia	Container tagging		Metal Kegs, Drums, Gas Cylinders etc.		Wood	Plastic, Wood, Glass (OM: Metal)			
Mounting method	glue, screw-on, rivet	glue, nail or screw	glue, cable tie	weld		Nail	Embed, glue or screw-on			
Operating Temperature¹	-40°C to +85°C	-40°C to +85°C		-40°C to +85°C		-25 °C to +85 °C	-25°C to +85°C	-40°C to +85°C	-25°C to +85°C	-40°C to +85°C
Storage Temperature¹	-40°C to +85°C	-40°C to +85°C		-40°C to +85°C		-25 °C to +85 °C	-40 °C to +90 °C			
Peak Temperature¹	Shock from -30 to +85°	Shock -40° to +85°		Shock -40° to +85°		N/A	+140 °C (100h)			
Housing Material	TPE, TPU or Polycarbonate	ABS/PC	PC/PC Makrolon 2407	PA		PPA	PPA Polyphthalamide			
Chemical and Environmental Resistances¹	Water, IP68 (2m, 24h), Salt mist, Petroleum, Mineral and vegetable oils, UV resistant	Water, IP69K (100 bar at 80°C, 30 sek., 16 l/min), Salt Mist, Petroleum, Oils,	Alcohol, aqueous solution of salts, fuel B, ammonium chloride (25%), hydrochloric acid (10%), salt water	Water, IP68 (6.6 ft (2 m) x 24 h), Salt Mist, Petroleum, Oils, Humidity 70°/80%			Water, IP69K (100 bar at 80°C, 30 sek., 16 l/min), Salt mist, Fuel B, Petroleum, Mineral and vegetable oils, Food compatible, Flame resistant UL94 HB			
Mechanical Resistances¹	Vibration IEC 68.2.6, Shock IEC 68.2.29, Impact IEC 62262-IK06		Vibration IEC 68.2.6, Shock IEC 68.2.29	Vibration IEC 68.2.6, Shock IEC 68.2.29, Impact IEC 62262-IK07 Vibration IEC 68.2.6, Shock IEC 68.2.29, Impact IEC 62262-IK08	Vibration IEC 68.2.6, Shock IEC 68.2.29, Impact IEC 62262-IK08	N/A	Vibration IEC 68.2.6, Shock IEC 68.2.29			
Axial / Radial Force¹	1000N	500N		1000N		N/A	800N / 500N (10 sec)			
Warranty⁴	2 Years			2 years		2 years	2 years			

* For further specification details, please see datasheets of the respective products.
Read range is strongly dependent upon multiple parameters including reader, environment and application. HID Global tags are tested and proven to be at the top of their class.
*1) Unique (64 bit RO), Q5 (264 bit RW), Hitag S (32 bit RO, 256 bit RW, 2048 bit RW), EM4305 (512 bit RW)

ICODE SLIX (1024 bit EEPROM, incl. 896 bit user memory), ICODE SLIX2 (2560 bit user memory)
*4) Warranty: Storage condition must not exceed specification for temperature, chemical, mechanical, electrical condition, storage from -25°C to + 50°C, humidity 20% to 80%

FINDING WHAT YOU NEED:
HID Global is has many more products to offer than fits on this page. Please refer to hidglobal.com or contact an HID representative for further assistance in evaluating these tags or selecting a solution that best fits your particular requirements.

hidglobal.com

Medical and Health

Comparison Chart

	Epoxy Tag	Logi Tag 161	LinTRAK®	Glass Tag Ultra	Brick Tag Ceramic	Piccolino Tag	BEEKs™ Personal Beacons	BEEKs™ Asset Beacons
Application	Extra thin, printable RFID tags with high mechanical and thermal stability	Mechanical, chemical and temperature resistant tags for harsh environments	Flexible UHF tag for linen or other medical laundry	Glass Tube with up to 35% better read range than standard tube of same size	Miniature UHF tags for tracking small metal assets	Tiny tag for custom housing with high memory capacity and fast anti-collision	Personal BLE beacons for location services and building occupancy	BLE beacons for asset location services, wayfinding or retail applications
Frequency	125 kHz / 13.56 MHz / 860-960 MHz (Worldwide)	13.56 MHz	860-960 MHz (Worldwide)	134.2 kHz	865 MHz (EU) / 915 MHz (US)	13.56 MHz	Bluetooth Low Energy (BLE) 4.2	
Size	Ø20x1 mm / Ø20 or 30x1 mm / 30 × 45 × 1.6 mm	83x25x1 mm / Ø16x3.0mm	max. 70x15 mm	Ø2x9 mm, Ø2x12.5 mm	5x5x3, 10x2x2, 10x5x3, 23x9x3 mm	Ø 7.5/6/9.5 mm / Ø9.5x1 mm	54 × 86 x 2.5 mm and others	60 × 21 x 25 mm and others
Screw Hole	none / None, Ø3.2 mm / 5 mm / 3 mm	N/A	N/A	N/A		N/A		
Standards / Protocol Support	N/A / ISO 14443A - NFC Tag Type 4 / EPC C1G2, ISO 18000-6C	ISO 15693, ISO 18000-3, ATEX	EPC C1G2, ISO 18000-63	ATEX	ISO 18000-6C, EPC C1G2,	ISO 15693, ISO 18000-3 / ISO 15693	FCC / CE	FCC / CE / JRF / IC
Chip Type	HITAG S / Unique / Trusted Tag / Monza R6-P	ICODE SLIX2 / F-Mem	Monza M730, Monza M5, Monza R6-P	EM 4305	Higgs 3, Monza R6-P	ICODE SLIX2, ICODE DNA, Vigo / F-Mem	BLE	
Memory[1]	2048 bit RW / 64 bit RO / 8 KB / 28/96 bit EPC, 32/64 bit UM	2560 bit UM / 8 Kbyte FRAM	128 bit EPC, 96 bits EPC	512 bit RW	64 bit TID, 96 bit EPC, 512 bit RW, 28/96 bit EPC, 32/64 bit UM	up to 2560 bit RW / 2 Kbit RW (6 mm)/16 Kbit RW	N/A	
Anti-collision	Yes / N/A / Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Typical Use Environment	Plastic	Clothing and Textiles, non-metal Tools and Boxes	Linen, garments	Used in customized housings		Consumables, Instruments	Real-Time Location	
Reading Distance*	N/A / Proximity (NFC Tap) / Up to 19.7 ft (6 m)	up to 13.4 ft (34 cm)	Up to 26 ft (8m)		up to 22.9 ft (7 m)	N/A	up to 164 ft (50 m)	
Mounting Method	Screw-on, glue or encapsulate	sew into, glue, embed	sew, heat-seal, embed	External housing	Glue	embed	Clip	3M VHB adhesive sticker
Operating Temperature[2]	-25°C to +85°C / -40°C to +85°C	-25°C to +85°C		-25°C to +85°C (-40°C minimum for Unique and Q5 chip)	-40°C to +85°C	-40°C to +85°C / -20°C to +85°C	-20° to +70° C	-20° to +60° C
Storage Temperature[2]	-40 °C to +85 °C	-40°C to +85°C		-40°C to +90°C	-40°C to +85°C	-40 °C to +85 °C	-20° to +70° C	-20° to +60° C
Peak Temperature[2]	+140 °C (1x24h)	+120 °C (100h), Heat patch +220°C (30s)	428°F (220°C) / 30 seconds	Bioglass	+150°C	N/A		
Housing Material	Epoxy	PPS	TPE		Ceramic	Epoxy	Polycarbonate and ABS	
Chemical and Environmental Resistances[2]	Water, IP69K (100 bar at 80°C, 30 sek., 16 l/min), Salt Mist, Petroleum, Oils	Water, IP68 (1m, 24h), HCL, Bleach, Perchlorethylen	All standard chemicals used in laundry process	Water, IP68 (1m, 24h), Saltwater, Alcohol, HCL, Fuel, Ammonia	Water, IP67 (1m, 1h), Salt mist, Petroleum, Mineral and vegetable oils	Depends on finished product	Water and UV resistant (except for BEEKs ™ Keyfob)	
Mechanical Resistances[2]	Vibration IEC 68.2.6, Shock IEC 68.2.29, 100 drops 1.8 m			Vibration IEC 68.2.6, Shock IEC 68.2.29		N/A		
Axial / Radial Force[2]	N/A	800 N / 500 N (10 sec)				N/A		
Pressure[2]	N/A	70 bars (3 min, isostatic)	60 bars (extraction press)	70 bars (5 min, isostatic)		N/A		
Warranty[3]	2 years	2 years	3 years	2 years		2 years	2 years	1 Year

* For further specification details, please see datasheets of the respective products.
Read range is strongly dependent upon multiple parameters including reader, environment and application. HID Global tags are tested and proven to be at the top of their class.
*1) ICODE SLIX (1024 bit EEPROM, incl. 896 bit user memory), ICODE SLIX2 (2560 bit user memory), Vigo (1024 bit RW)
*4) Warranty: Storage condition must not exceed specification for temperature, chemical, mechanical, electrical condition, storage from -25°C to + 50°C, humidity 20% to 80%
For unpackaged tags: Warranty would depend on finished product and can only be given as long as raw product is not processed / packaged

FINDING WHAT YOU NEED:
HID Global is has many more products to offer than fits on this page. Please refer to hidglobal.com or contact an HID representative for further assistance in evaluating these tags or selecting a solution that best fits your particular requirements.

hidglobal.com

FINDING WHAT YOU NEED

HID Global has many more products to offer than fit on this page. Please refer to **hidglobal.com/rfid** or contact an HID representative for further assistance in evaluating these tags or selecting a solution that best fits your particular requirements.

Commercial Laundry

LAUNDRY

Product Name	LinTRAK®	MuTRAK	SlimTRAK	BluTAG	Logi Tag 161	Logi Button Tag 162	Logi Tag 120	Logi Tag 160
Application	Flexible UHF tag for linen, garments or other laundry	Ultra-Small and Robust Tag and easily integrates into RFID applications requiring discreet placement.	UHF Tag for metallic laundry cages identification and tracking.	Thin disc specifically designed to identify linen and textile products.	Mechanical, chemical and temperature resistant tags for harsh environments such as laundries			
Frequency	865 MHz (EU) / 915 MHz (US)			13.56 MHz	13.56 MHz		125 kHz	
Size	max. 70x15 mm	7 x 7 mm	83 x 25 mm	Ø15 mm	Ø16x3 mm	Ø16x2.5 mm	Ø12.4x2 mm	Ø16x3 mm
Standards / Protocol Support	EPC C1G2, ISO 18000-63	EPC C1G2, ISO 18000-63	EPC C1G2, ISO 18000-6C	ISO 15693, ISO18000-3	ISO 15693, ISO 18000-3, ATEX		ATEX	
Chip Type[1]	Monza M730, Monza M5, Monza R6-P	Monza M730	Monza R6-P	EM4033	ICODE SLIX2	F-Mem	ICODE SLIX 2	HITAG S, Q5, Unique	Unique
Memory	128 bit EPC, 96 bits EPC	128 bits EPC	28/96 bit EPC, 32/64 bit UM	64 bit	2560 bit UM	8 Kbyte FRAM	2560 bit UM	64 Bit RO, 256 bit RW, 264 bit RW, 2048 bit RW	64 bit RO
Anti-collision	Yes				Yes		HITAG S - Yes	N/A
Reading Distance[2]	Up to 26 ft (8m)	Up to 4 inches (10 cm)	Up to 26.2 ft (8 m)		Up to 13.4" (34 cm)		N/A	
Mounting Method	sew, heat-seal, embed	Sew into hem, glue	Rivet, Glue	sew into, glue, embed	sew into, glue, embed	sew-on	Embed in cloth	
Operating Temperature[3]		-40°C to +85°C		-25 to +85 C	-25°C to +85°C		-25°C to +85°C	-40°C to +85°C
Storage Temperature[3]		-40°C to +85°C		-40 to +85 C	-40°C to +85°C		-40°C to +130°C	-40 °C to +120 °C
Peak Temperature[3]	428°F (220°C) / 30 seconds	392°F (200°C)	284°F (140°C), 24h		+120 °C (100h), Heat patch +220°C (30s)	+120 °C (100h)	+160 °C (35h)	
Spin Dryer / Tunnel Finisher[3]		365° F (185° C) / 30 minutes			+175 °C (100 x 10 min)		N/A	+175 °C (100 x 10 min)
Thermal Shock[3]					20°C to +160°C (100 x 5 min)		-20°C to +160°C (100 x 5 min)	
Housing Material	Cotton	Epoxy		PPS	PPS		PPS with epoxy potting	Epoxy
Chemical and Environmental Resistances[3]	All standard chemicals used in laundry process				Water, IP68 (1m, 24h), Industrial laundry detergent pH 10-11, Neutralizing agent, Hydrogen peroxide 5%, Perchlorethylen		Water IP68 (1m, 24h), saltwater, gasoline, oil, HCL, bleach, formic acid, caustic soda	
Mechanical Resistances[3]	Vibration IEC 68.2.6, Shock IEC 68.2.29, 100 drops 1.8 m						Vibration IEC 68.2.6, shock IEC 68.2.29	
Axial / Radial Force[3]			50 N, 1 x 10 sec		1000N / 1000N (10 sec)	800 N / 500 N (10 sec)	1000N / 1000N (10 sec)	800N / 500N (10 sec)	1000N / 1000N (10 sec)
Pressure[3]	60 bars (extraction press)	70 bars (5 min, isostatic)			70 bars (10 sec., isostatic)		70 bars (3 min, isostatic)	
Warranty[4]	3 years				2 years			

* For further specification details, please see datasheets of the respective products. Unique and I-Code SLIx have a minimum operating temperature of -40°C, previous chip generations had -25°C.
  Read range is highly dependent upon multiple parameters including reader, environment and application. HID Global tags are tested and proven to be at the top of their class.
*1) Unique (64 bit RO), Q5 (264 bit RW), Hitag S (256 bit RW, 2048 bit RW), Vigo (1024 bit RW)
  ICODE SLIX (1024 bit EEPROM, incl. 896 bit user memory), ICODE SLIX2 (2560 bit user memory)
*4) Warranty: Storage condition must not exceed specification for temperature, chemical, mechanical, electrical condition, storage from -25°C to + 50°C, humidity 20% to 80%

FINDING WHAT YOU NEED

HID Global has many more products to offer than fit on this page. Please refer to **hidglobal.com/rfid** or contact an HID representative for further assistance in evaluating these tags or selecting a solution that best fits your particular requirements.

COMPARISON CHART

FINDING WHAT YOU NEED:

HID Global is has many more products to offer than fits on this page. Please refer to hidglobal.com or contact an HID representative for further assistance in evaluating these tags or selecting a solution that best fits your particular requirements.

hidglobal.com

Product Name	Brick Tag Ceramic	InLine Ultra Standard	InLine Ultra Slim (weld)	InLine Ultra Pro (weld)	InLine Ultra Mini	SlimFlex Tag	Seal Tag vTamper (1)	Seal Tag vTamper (2)	Seal Tag vTamper (3)	Seal Tag eTamper (1)	Seal Tag eTamper (2)	Seal Tag eTamper (3)	Seal Tag edTamper (1)	Seal Tag edTamper (2)	World Tag (1)	World Tag (2)	Epoxy Tag (1)	Epoxy Tag (2)	Epoxy Tag (3)
Application	Miniature UHF tags for tracking small metal assets	Robust high performance, general purpose UHF transponder for metal and non metal outdoor use				Flexible, robust UHF tag. May be laser engraved with human readable information or barcode	Robust RFID seals with built-in tamper evident, easy to fix cable tie and electronic tamper detection in selected models								Best general use price/performance ratio for indoor asset identification		Thin, printable tag with high mechanical and thermal stability		
Frequency	865 MHz (EU) / 915 MHz (US)	860-960 MHz (Worldwide)				860-960 MHz (Worldwide)	13.56 Mhz	860-960 MHz (Worldwide)		13.56 Mhz			860-960 MHz (Worldwide)		125 kHz		125 kHz	13.56 Mhz	860-960 MHz (Worldwide)
Size	5x5x3, 10x2x2, 10x5x3, 23x9x3 mm	97 × 27 × 15 mm	97 × 27 × 10 mm Weld : 105 × 35 × 10 mm	97 × 27 × 15 mm Weld : 105 × 35 × 15 mm	60 × 18 × 8 mm	83×25×3 mm and others	85x25x3 mm, 60×12×2 mm (mini)	89 × 56 × 35 mm	23.3x17.5x3.3 mm		39×39×8.5 mm	118 × 23 mm	39 × 14 × 3.6 mm	95 × 42.5 × 8 mm	Ø20 or 30x2.1 mm	Ø50x2.1 mm	45x30x1.6 mm or Ø20 or 30x1 mm discs		83x25x1 mm
Screw Hole		Ø5.2 mm or optional steel ring to weld			Ø4.5 mm	various	Cable Tie: 380x6.4x2.15 mm, black	Cable Tie: 380x6.4x2.15 mm, 190×2.5×1.15 mm (mini), black	Cable tie: 450x9×2 mm, black	Seal wire : 65 mm, white			Seal wire: 78 mm	Seal wire: 80 mm	none or Ø3.2 mm	Ø4.2 mm	Ø5 mm		3 mm
Standards / Protocol Support	ISO 18000-6C, EPC C1G2,	UHF EPC Class 1 Gen 2, ISO 18000-6C, ISO 17364, DIN 40050-9				ISO 18000-6C, EPC C1G2, ISO 17364	ISO 15693, ISO 18000-3	EPC C1G2, ISO 18000-6C		ISO 15693, ISO 18000-3	ISO 14443A - NFC Tag Type 4	ISO/IEC 14443A, NFC Tag Type 2	EPC C1G2, ISO 18000-6C					ISO 14443A - NFC Tag Type 4	EPC C1G2, ISO 18000-6C
Chip Type	Higgs 3, Monza R6-P	Monza 4QT			Monza R6	Higgs 3, Monza R6-P	ICODE SLIX	Higgs 3, Monza R6-P	Higgs 4	ICODE SLIX	MIFARE DESFire EV1, Trusted Tag	HID Trusted Tag (TTS)	UCODE G2iM+	EM | AURA-SENSE	HITAG S, Q5, Titan, Unique		HITAG S, Unique	Trusted Tag	Monza R6-P
Memory [1]	64 bit TID, 96 bit EPC, 512 bit RW, 28/96 bit EPC, 32/64 bit UM	96 bit TID, 128 bit EPC, 512 bit RW			96 bit EPC, 48 bit TID	64 bit TID, 96 bit EPC, 512 bit RW - 128/96 bit EPC, 32/64 bit UM	1024 bit RW	64 bit TID, 96 bit EPC, 512 bit RW; 128/96 bit EPC, 32/64 bit UM	128 bit EPC, 64 bit TID, 128 bit RW	1024 bit RW	4.096 bytes	144 byte EEPROM	112 bit user memory + 256 bit EPC + 96 bit TID	2 kbit user memory + 416 bit EPC + 48 bit TID	64 bit RO, 256 bit RW, 264 bit RW, 1024 bit RW, 2048 bit RW		64 bit RO, 256 bit RW	8 KB	28/96 bit EPC, 32/64 bit UM
Anti-collision	Yes	Yes				Yes									HITAG S - Yes		HITAG S - Yes		Yes
Reading Distance*	up to 22.9 ft (7 m)	up to 26.2 ft (8 m)	up to 16.4 ft (5 m)	Up to 22.9 ft (7 m)	up to 9.8 ft (3 m)	Up to 19.7 ft (6 m)		Up to 20 ft (6 m), 16 ft (5 m) for mini	up to 32.8 ft (10 m)				Up to 6.6 ft (2 m)	Up to 13.1 ft (4 m)					Up to 19.7 ft (6 m)
Typical Use Environment	Metal	Metal, Plastic, Wood, Glass				Plastic, Wood, Any material	Industrial bags, containers, equipment								Plastic, Glass		Asset tracking or access control & time attendance		Asset Tracking
Mounting Method	Glue	Screw-on or Weld				glue, screw-on, rivet	integrated cable tie				Sticker	Self-adhesive	Integrated wire loop		glue or screw-on	screw-on	Screw-on, Keyring, Chain		screw-on, glue or encapsulate
Operating Temperature*	-40°C to +85°C	-40°C to +85°C				-40°C to +85°C	-40°C to +70°C			-40°C to +85°C	-25°C to +70°C	- 20 °C to +70 °C	-40°C to +70°C		-25°C to +70°C		-25°C to +85°C		-40°C to +85°C
Storage Temperature*	-40°C to +85°C	-40°C to +85°C				-40°C to +85°C	-40°C to +70°C			-40°C to +90°C		-10° to +40°C	-40°C to +70°C		-40°C to +90°C		-40°C to +95°C		-40°C to +85°C
Peak Temperature*	+150°C	Shock -40° to +85°				Shock from -30 to +85°	Shock -40°C to +70°C			Shock -40°C to +90°C			Shock -40°C to +70°C		+100 °C (100h)		+140 °C (1x24h)		+160 °C (1x10h)
Housing Material	Ceramic	PC-ABS				TPE, TPU or Polycarbonate	TPU / Nylon 6.6			Polycarbonate		Paper	PC/ABS	ABS	PC		Epoxy		
Chemical and Environmental Resistances*	Water, IP67 (1m, 1h), Salt mist, Petroleum, Mineral and vegetable oils	Water, IP69K (100 bar at 80°C, 30 sek., 16 l/min), Salt Mist, Petroleum, Oils, Humidity 70°/80%				Water, IP68 (2m, 24h), Salt mist, Petroleum, Mineral and vegetable oils, UV resistant	Water, IP68 (2m, 24h), Salt mist, Petroleum, Mineral and vegetable oils, UV resistant				Water, IP65	Water, IP67	Flame Resistant UL94V0 (self-extinguishing)				Water, IP69K (100 bar at 80°C, 30 sek., 16 l/min), Salt Mist, Petroleum, Oils		
Mechanical Resistances*		Vibration IEC 68.2.6, Shock IEC 68.2.29, Impact IEC 62262-IK09	+ Caustic Soda (5%)	Vibration IEC 68.2.6, Shock IEC 68.2.29, Impact IEC 62262-IK07		Vibration IEC 68.2.6, Shock IEC 68.2.29, Impact IEC 62262-IK06	Vibration IEC 68.2.6, Shock IEC 68.2.29, Impact IEC 62262-IK06, Cable tie pull resistance >600N	Vibration IEC 68.2.6, Shock IEC 68.2.29, IEC 62262-IK08, Cable tie pull resistance >600N		Vibration IEC 68.2.6, Shock IEC 68.2.29					Vibration IEC 68.2.6, Shock IEC 68.2.29,		Vibration IEC 68.2.6, Shock IEC 68.2.29, 100 drops 1.8 m		
Axial / Radial Force*	1000N	1000N				1000N	1000 N, 10 sec						500 N, 10 sec	100 N, 10 sec	500N / 300N (10 sec)	500N / 100N (10 sec)	1000N (10 sec)		
Warranty [4]	2 Years	2 Years				2 Years									2 Years		2 Years		

* For further specification details, please see datasheets of the respective products.
  Read range is strongly dependent upon multiple parameters including reader, environment and application. HID Global tags are tested and proven to be at the top of their class.
*1) Unique (64 bit RO), Q5 (264 bit RW), Hitag S (32 bit RO, 256 bit RW, 2048 bit RW), EM4305 (512 bit RW), Titan (1024 bit RW) ICODE SLIX (1024 bit EEPROM, incl. 896 bit user memory), ICODE SLIX2 (2560 bit user memory)
*4) Warranty: Storage condition must not exceed specification for temperature, chemical, mechanical, electrical condition, storage from -25°C to + 50°C, humidity 20% to 80%

FINDING WHAT YOU NEED

HID Global has many more products to offer than fit on this page. Please refer to **hidglobal.com/rfid** or contact an HID representative for further assistance in evaluating these tags or selecting a solution that best fits your particular requirements.

COMPARISON CHART

FINDING WHAT YOU NEED:
HID Global is has many more products to offer than fits on this page. Please refer to hidglobal.com or contact an HID representative for further assistance in evaluating these tags or selecting a solution that best fits your particular requirements.

RFID EMBEDDABLE

Product Name	Glass Tags	Glass Tags	Glass Tags	Glass Tags	Glass Tags	Glass Tags	Glass Tags	Glass Tag Ultra	Clear Disc	Clear Disc	Inlays & Labels	Piccolino Tag	Piccolino Tag	Logi Tag 081	E-Unit Rod	E-Unit Rod	E-Unit Disc	E-Module	Brick Tag	Brick Tag
Application	Small size with high chemical resistance provides an ideal solution for long term immersion into liquid or customized enclosures							Glass Tube with up to 35% better read range than standard tube of same size	Clear disc tag for custom housing		Clear inlays or printable labels for NFC or other applications	Tiny tag for custom housing with high memory capacity and fast anti-collision		Embeddable RFID tags - designed for customized enclosure				Tag for car immobilizers, cables and other special applications where small size is required	
Frequency	125 kHz			134.2 kHz		13.56 MHz		134.2 kHz	125 kHz	13.56 MHz	13.56 MHz	13.56 MHz		13.56 MHz	134.2 kHz		13.56 MHz	13.56 MHz	125 kHz	13.56 MHz
Size	Ø1.4x8 mm	Ø2x12 mm, Ø3x13 mm	Ø4x22 mm	Ø3x13 mm, Ø4x22 mm	Ø3.85x22.5 mm	Ø2x12 mm, Ø3x13 mm	Ø4x22 mm	Ø2x9 mm, Ø2x12.5 mm	Ø20 or 30x0.6 mm	Ø22 or 30x0.6 mm	Ø25x0.75 mm	Ø29 or 40 mm or 18x57 mm (ICODE SLIX)	Ø6x0.8 mm, Ø7.5x1 mm, Ø9.5x1 mm	Ø 6/9.5 mm	Ø8x2 mm	Ø 1.8x15mm	Ø24, 28 mm or custom	Ø 14.5 x 0.9 mm + hole Ø 6.8 mm	12.1 x 6.1 x 3.0 mm	10.2 x 3 x 2.6 mm
Standards / Protocol Support[1]	ATEX			EN14803, ATEX		ISO 15693, ISO 18000-3, ATEX		ATEX		ISO 14443	ISO 14443 or 15693, NFC	ISO 15693, ISO 18000-3	ISO 15693	ISO 15693, ISO 18000-3	ISO 11784, ISO 11785			ISO 15693, ISO 18000-3	n/a	ISO 15693, ISO 18000-3
Chip Type	EM4305	Q5, HITAG S, Unique	Unique	FDX-b BDE	HDX BDE	Vigo	ICODE SLIX	EM 4305	HITAG S, Unique	Q5	MIFARE 1K, DESFire EV1 4K	NTAG 213, ICODE SLIX, Trusted Tag	ICODE SLIX2, ICODE DNA, Vigo	F-Mem	Vigo	HITAG S	EM4305 / HITAG S	ICODE SLIX	HDX, Nova	Vigo
Memory[2]	512 bit RW	64 bit RO, 256 bit RW, 264 bit RW, 2048 bit RW	64 bit RO	128 bit RO		1664 bit RW	1024 bit RW	512 bit RW	64 bit RO, 256 bit RW, 2048 bit RW	264 bit RW	1-4 kByte RW	144 Byte, 112 byte or 8 KByte	2560 bit RW or 1664 bit RW (6 mm Vigo)	2 Kbit RW 16 Kbit RW	1024 bit RW	256 bit RW	512 bit RW / 256 bit RW	1024 bit RW	128 bit RO, 160 bit RW	1024 bit RW
Anti-collision		HITAG S - Yes				Yes			HITAG S - Yes	Yes			Yes	Yes	Yes		HITAG S - Yes	Yes		
Typical Use Environment	Used in customized housings for non-animal applications								Custom enclosure		Smart poster, non-metal assets	Custom enclosure		Custom enclosure	Custom enclosure				Custom enclosure	
Mounting Method	External housing								Custom enclosure		Glue	Custom enclosure		Sew into, glue, embed	Custom enclosure				Custom enclosure	
Operating Temperature*	-25°C to +85°C (-40°C minimum for Unique and Q5 chip)							-20°C to +60°C			-20°C to +70° C	-40°C to +85°C	-20°C to +85°C	-40°C to +85°C	-25 °C to + 60 °C			-25 °C to + 85 °C	-40°C to +90°C	-25°C to +70°C
Storage Temperature*	-40°C to +90°C							-20°C to +60°C			-20°C to +70° C	-40°C to +85°C		-40°C to +90°C	-40 °C to + 60 °C			-40 °C to + 120 °C	-40°C to +120°C	-25°C to +70°C
Peak Temperature*	+120 °C (100h) +140°C (10h)																			
Housing Material	Bioglass								Polyethylen + Polyester (outside)		PET (inlay), Paper (label)	Epoxy		ABS/Epoxy Potting				Epoxy glob top	Epoxy over-molded	ABS/Epoxy Potting
Chemical and Environmental Resistances*	Water, IP68 (1m, 24h), Saltwater, Alcohol, HCL, Fuel, Ammonia								Depends on finished product		Water, IP67 (1m, 1h)	Water, IP67 (1m, 1h)		Water, IP68 (1m, 24h)	Depends on finished product				Water IP68, salt-water, gasoline, oil, HCL, bleach, formic acid, caustic soda	
Mechanical Resistances*	Vibration IEC 68.2.6, Shock IEC 68.2.29								Depends on finished product		Vibration IEC 68.2.6, Shock IEC 68.2.29	Depends on finished product			Depends on finished product			Vibration IEC 68.2.6, Shock IEC 68.2.29	Vibration IEC 68.2.6, Shock IEC 68.2.29	
Warranty[4]	2 Years										2 Years	2 Years		2 Years	2 Years				2 Years	

* For further specification details, please see datasheets of the respective products.
Read range is strongly dependent upon multiple parameters including reader, environment and application. HID Global tags are tested and proven to be at the top of their class.
*1) ISO 11784, ISO 11785 for Hitag S and EM4305 chip only
*2) Unique (64 bit RO), Q5 (264 bit RW), Hitag S (32 bit RO, 256 bit RW, 2048 bit RW), Titan (1024 bit RW), EM4305 (512 bit RW), ICODE SLIX (1024 bit EEPROM, incl. 896 bit user memory), ICODE SLIX2 (2560 bit user memory), Vigo (1024 or 1664 bit RW), NTAG 213 (144 Byte RW), Trusted Tag (8 KB RW)
*4) Warranty: Storage condition must not exceed specification for temperature, chemical, mechanical, electrical condition, storage from -25°C to + 50°C, humidity 20% to 80%
For unpackaged tags: Warranty would depend on finished product and can only be given as long as raw product is not processed / packaged

FINDING WHAT YOU NEED

HID Global has many more products to offer than fit on this page. Please refer to **hidglobal.com/rfid** or contact an HID representative for further assistance in evaluating these tags or selecting a solution that best fits your particular requirements.

FINDING WHAT YOU NEED:

HID Global is has many more products to offer than fits on this page. Please refer to hidglobal.com or contact an HID representative for further assistance in evaluating these tags or selecting a solution that best fits your particular requirements.

HID

Industry & Logistics Embeddable Readers

Product Name	Multi-Tag	MIFARE Easy		Multi-ISO	
Product Type	Reader Core	Reader Core	Reader Board RS232 Compact	Reader Core	Reader Board RS232
Base Model Number	701800013 (FDX), 0701800013-1 (FDX+HDX)	0701800133-IDT	0701800029-IDT	0701800159-1	701800160
Dimensions	25.5 mm x 30.5 mm x 6 mm	25.5 mm x 30 mm x 4.8 mm	70 mm x 45 mm x 12.1 mm	25.5 mm x 30 mm x 4.8 mm	70 mm x 45 mm x 12.1 mm
Power Supply	5VDC +/- 10% Regulated	5 VDC ± 10% regulated		5 VDC ± 10% regulated	
Power Supply Connector	N/A	N/A		N/A	
Antenna Support	Single External	External	Integrated	External	Integrated
External Antenna Connector	N/A	N/A		N/A	
RF Transmit Frequency	125 kHZ , 134.2 kHz	13.56 MHz		13.56 MHz	
Supported Standards	ISO 11784, ISO 11785 ISO 18000-2	ISO 14443 A		ISO14443A, ISO14443B, ISO 15693, ISO 18000-3, NFC enabled, ICODE	
Supported Tag-IC's	HITAG 1, HITAG 2, HITAG S, Q5 EM4X02, EM4X05 (ISO FDX B), EM4X50 TI-RFID systems 134.2 kHz 64Bit R/O, TI-RFID systems 134.2 kHz 64Bit R/W TI-RFID systems 134.2 kHz 1088Bit multipage	MIFARE® Standard, MIFARE® 4k, MIFARE® Pro X, MIFARE® Ultralight, MIFARE® DESFire® (serial no. only), SLE66R35, SLE44R35, ISO 14443A Tags		MIFARE™ Standard / EV1, MIFARE 4k, MIFARE Plus, MIFARE Pro, MIFARE Ultralight, MIFARE Ultralight C, MIFARE DESFire®, MIFARE DESFire EV1 /EV2, MIFARE SmartMX, NTAG 2xx, ICODE SLIX (SL2 ICS 20), ICODE EPC (SL2 ICS 10), I-CODE UID, (SL2 ICS 11), ICODE, NFC (Reader To Tag Mode) SLE 55Rxx, SRF55VxxP +S, SLE 66CL160S, SLE 66CLX320P, SR176, SRIX4K, LRI 64, LRI 512, EM4135, KSW Temp Sens® Tag-it™ HF-I Standard, Tag-it™ HF-I Pro, Jewel Tag, Sharp B, ISO14443A Tags, ISO14443B Tags, ISO15693 Tags, ISO18000-3 Tags, MasterCard PayPass and Visa payWave compliant tags	
Communication Interface	CMOS-TTL Serial Interface 9600Bits/s to 115kBits/s, 8, N, 1	CMOS-TTL Serial Interface 9600Bits/s to 57600Bits/s, 8, N, 1	RS232 Serial Interface 9600Bits/s to 57600Bits/s, 8, N, 1	CMOS-TTL Serial Interface 9600Bits/s to 460kBits/s, 8, N, 1	RS232 Serial Interface 9600Bits/s to 115kBits/s, 8, N, 1
Global Certification	RoHS, WEEE	RoHS		RoHS	
Software	DLL (C++) & Reader Utility Program	Virtual COM port, API - DLL		Virtual COM port, API - DLL (MSVC++)	
Warranty	1 Year	1 Year		1 Year	

CE

FINDING WHAT YOU NEED:

HID Global is has many more products to offer than fits on this page. Please refer to hidglobal.com or contact an HID representative for further assistance in evaluating these tags or selecting a solution that best fits your particular requirements.

hidglobal.com