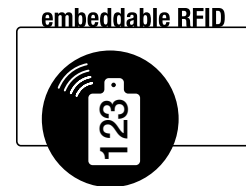


PRODUCT COMPARISON CHART

Embeddable RFID



Product Name	Glass Tags								Glass Tag Ultra	Clear Disc				Piccolino Tag		E-Unit Rod	E-Unit Disc	e-Module
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				Tiny tag for custom housing with high memory capacity and fast anti-collision				Embeddable RFID tags - designed for customized enclosure
Frequency	125 kHz				131 kHz	134.2 kHz	13.56 MHz	134.2 kHz	125 kHz	13.56 MHz		13.56 MHz				13.56 MHz		
Size	Ø1.4x8 mm	Ø2x10 mm	Ø2x12 mm	Ø3x13 mm	Ø4x34 mm	Ø3x13 mm	Ø3x13 mm, Ø4x22 mm	Ø4x22 mm	Ø2x9 mm, Ø2x12.5 mm	Ø20 or 30x0.6 mm	Ø22 or 30x0.6 mm	Ø25x0.75 mm		Ø7.5x1 mm, Ø9.5x1 mm	Ø9.5x1 mm	Ø1x7 mm, Ø1.8x15 mm	Ø 20, 24, 27, 28 mm or custom	Ø 14.5 x 0.9 mm + hole Ø 6.8 mm
Standards / Protocol Support ¹							EN14803	ISO 15693, ISO 18000-3			EN14443			ISO 15693, ISO 18000-3	ISO 15693	ISO 11784, ISO 11785		ISO 15693, ISO 18000-3
Chip type	Hitag µ	Hitag S	Q5, Hitag S, Unique	Q5, Hitag S, Titan	Unique	Unique	FDX-b BDE	I-Code SLix	EM 4305	Hitag S, Unique	Q5	MIFARE 1K, DESFire EV1 4K	Legic MIM 256, 1024	I-Code SLix, SLix-S	F-Mem	Hitag S, EM4305		I-Code SLix
Memory ²	128 bit RW	256 bit RW, 2048 bit RW	64 bit RO, 256 bit RW, 264 bit RW, 2048 bit RW	256 bit RW, 264 bit RW, 1024 bit RW, 2048 bit RW	64 bit RO	64 bit RO	128 bit RO	1024 bit RW	512 bit RW	64 bit RO, 256 bit RW, 2048 bit RW	264 bit RW	1-4 kByte RW	256 or 1024 bit RW	1024 bit RW, 2048 bit RW	16 Kbit RW	256 bit RW, 512 bit RW, 2048 bit RW		1024 bit RW
Anti-collision		Yes	Hitag S - Yes	Hitag S - Yes				Yes		Hitag S - Yes		Yes		Yes		Hitag S - Yes		Yes
Typical Use Environment	Used in customized housings for non-animal applications									Depends on finished product						Depends on finished product		
Mounting Method	External housing									Depends on finished product						Depends on finished product		
Operating Temperature ³	-25 °C to +85 °C									-20 °C to +60 °C				-40 °C to +70 °C		-25 °C to +60 °C		-25 °C to +85 °C
Storage Temperature ³	-40 °C to +90 °C									-20 °C to +60 °C				-40 °C to +85 °C		-40 °C to +60 °C		-40 °C to +120 °C
Peak Temperature ³	+120 °C (100h) +140 °C (10h)																	
Housing Material	Glass								Bio Glass	Polyethylen + Polyester (outside)				Epoxy				FR4 + Epoxy glob top
Chemical and Environmental Resistances ³	Water, IP68 (1m, 24 h), saltwater, alcohol, HCL, fuel, ammonia									Depends on finished product				Depends on finished product		Depends on finished product		
Mechanical Resistances ³	Vibration IEC 68.2.6, shock IEC 68.2.29									Depends on finished product				Depends on finished product		Depends on finished product		Vibration IEC 68.2.6, Shock IEC 68.2.29
Warranty ⁴	2 years									2 years				2 years		2 years		

Finding what you need

HID Global has many more products to offer than fit 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.

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)
³ For further specification details, please see datasheets of the respective products. I-Code SLix and F-Mem MBB9R118C have a minimum operating temperature of -40°C, previous chip generations had -25°C.
⁴ Storage condition must not exceed specification for temperature, chemical, mechanical, electrical condition, storage from -25°C to +50°C, humidity 20% to 80%