

# Adept Tag

High-performance RAIN® RFID tags optimized for specific industrial purposes



One of the reasons HID has the largest product portfolio in the market is our ability to create custom-designed products to fit very specific customer needs. Sometimes these products remain custom for a specific application — but at other times they can become products marketed to our global customer base.

From strap attachment tags for large cylinders, via hang tags for cables, to high-memory passive RFID labels, steel-encased tags for very heavy industry and tiny, unobtrusive embedded tags, this family of industrial RFID tags is designed to meet specialty use cases and non-traditional applications.

The Adept tag range includes several examples of rugged, industrial custom products but is by no means an exhaustive list. For any special RFID needs, please inquire with us to learn how HID Global's proven custom design and manufacturing capabilities may help improving your specific use case.



## KEY BENEFITS:

- Various form factors including ultra-rugged options
- Wide range of attachment options including steel band, welded, riveted, tethered, adhesive and wire rope
- Optimized for use on metal with options for US and EU frequency plus versatile 'global' versions.

## TECHNOLOGY HIGHLIGHTS:

RAIN® RFID (UHF)







- Impact resistant housings
- Special design for cable or band attachments

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## APPLICATION AREAS:

- Tagging gas cylinders and kegs
- Outdoor industrial applications
- Tagging pipes valves and fixed assets in oil and gas facilities
- Various use in harsh environments where heavy impacts are a regular occurrence
- Automotive applications

	Adept					
	400 TH	400	400 DATA	360	500	850 HM
						
Base Model Number	CP14902	CP13676	CP08728-02	CP16741	CP16202-01	CP08897
	ELECTRONIC					
Operating Frequency	(US) - 902-928 MHz (FCC)	865-928 MHz (Global)				
Chip Type	UCODE 8	Monza 4QT	M730	Alien H3 (UHF) NXP I-Code (HF opt.)	Monza R6-P	Qstar-2A
Memory	EPC - 128 bits Unique TID - 48 bits	128 bit EPC + 96 bit TID + 512 bit user memory	128 bit EPC	96 bit EPC + 96 bit TID + 512 bit user memory	28/96 bit EPC, 32/64 bit UM	240 bit EPC, 64K Bt UM
Anti-Collision	Yes					
Reading Distance (2W reader ERP, free space)	Up to 14.7 ft (4.5 m)	Up to 13.1 ft (4 m)		Up to 16.4 ft (5 m); Up to 0.3 ft (0.1 m) HF opt.	Up to 16.4 ft (5 m)	Up to 27.9 ft (8.5 m)
	PHYSICAL					
Dimensions	1.22 x 2.2 x 0.5 in (31 x 56 x 12.7 mm)	1.44 x 1.44 x 0.65 in (36.5 x 36.5 x 16.5 mm)	1.48 x 0.49 x 0.17 in (37.5 x 12.5 x 4.5 mm)	5.4 x 1.9 x 0.2 in (136.5 x 48 x 5.5 mm)	1.4 x 1.4 x 0.4 in (37 x 37 x 11.5 mm)	2.5 x 1.8 x 0.31 in (65 x 45 x 8 mm)
Mounting Method	Tether attachment	Metal strap, wire rope	Film adhesive and tether hole	Tether attachment	Foam	Screw, Rivet, or premium foam
Screw Mounting Hole	Ø 0.50 in (12.7 mm)		Ø 0.09 IN (2.5 MM)	Ø 1.34 in (34 mm)		Ø 0.20 in (5.20 mm)
Affixes To	All surfaces, including metal					
Housing Material	Stainless Steel with Ceramic Core	Stainless Steel with Ceramic Core	Synthetic label	Steel frame	Durable Thermoplastic	ABS
Color	Gray					
Weight	2.1 oz (59 g)	2.45 oz (69.5 g)	0.07 oz (2.2 g)	0.9 oz (126 g)	0.3 oz (9.8 g)	1.2 oz (34 g)
	CHEMICAL AND MECHANICAL					
Water	IP68, 68° F (20° C), 1 m x 24 h		IP54, 68° F (20° C), 1 m x 24 h	IP68, 68° F (20° C), 1 m x 24 h		
Withstands Exposure To	Mineral oil, 5% caustic soda (24 Hrs.), 10% salt water, vegetable oil, motor oil	Mineral oil, vegetable oil, motor oil	Mineral oil, vegetable oil, motor oil	Mineral oil, 5% caustic soda (24 Hrs.), 10% salt water, vegetable oil, motor oil		
Vibration & Shock	MIL STD 810-G		MIL STD 810-F			MIL STD 810-G
Impact	10 Kg Steel, 1m	10 Kg Steel, 1m		25 Kg Steel, 1 m	8 Kg Steel, 1 m	2 Kg Steel, 1 m
	THERMAL					
Storage	-40° to +185° F (-40° to +85° C)		23° to +131° F (-5° to +55° C)	-4° to +185° F (-20° to +85° C)	-4° to +149° F (-20° to +65° C)	-4° to +185° F (-20° to +85° C)
Operating Temperature	-4° to +185° F (-20° to +85° C)		23° to +131° F (-5° to +55° C)	-40° to +185° F (-40° to +85° C)	-4° to +149° F (-20° to +65° C)	-4° to +185° F (-20° to +85° C)
Shock/Fatigue	-40° to +185° F (-40° to +85° C), 100 x 5 min with 30 sec transition					
	OTHER					
Standards	UHF EPC Class 1 Gen 2, ISO 18000-6C, ISO 17364, DIN 40050-9					
Options	Laser engraving of custom logo, barcode or text. By default, tags are supplied without logo or laser engraving. ATEX/IECEX, C1D1				Custom embossed logo, no logo or custom tag color. Laser engraving of custom logo, barcode or text on gray tag versions. By default, grey tags are supplied without logo or laser engraving. Foam adhesive can be supplied as an add-on. ATEX/IECEX, C1D1	
Box Size	144	180	1600	120	768	400
Warranty	2 years					

