

# EXO Slim Tag

## Wafer-thin UHF or HF/UHF asset tags for containers or metallic equipment



HID Global EXO Slim Tag transponders are the ideal solution for tagging shipping containers or other metallic assets. Some models being less than two-tenths of an inch (3.5 mm) thick, these tags mount flush to any surface. The high impact polycarbonate housings shield internal components from the environmental extremes and rugged treatment of industrial freight operations.

This versatile range of tags provides more ruggedization than standard on-metal labels and includes both global and regional options. The EXO Slim range provides cost effective solutions for volume applications in manufacturing and industry – especially for tracking and managing IT office assets, portals and returnable transport items (RTI's). There is a wide choice in terms of label size, read range, printing options and encasement alternatives.

Standard grey EXO Slim InLine Plate Tags provide excellent contrast for imprinting. The large surface accommodates embossing, laser-engraving or adhesive labels for a logo, barcode, serial number or text message.

Tough and versatile, EXO Slim Tag transponders are available for mounting on metal, plastic or wood using standard nails, screws or industrial adhesives.

The tags are lightweight, dust tight,

waterproof and protected against close-range high pressure, high temperature spray downs (IP69K) for some models.

EXO Slim Tag UHF improve data collection speed and accuracy for logistics applications, while making tracking more cost-effective. The plates can be read from distances of up to a 34 ft (10 m), and are compliant with EPC global-certified UHF Class 1 Gen 2 readers and modules.

EXO Slim SHELL low-profile RFID tags are ideal for light duty indoor assets tracking. SHELL+ tags are ultrasonic sealed with a plastic back side to screw, while SHELL tags come with a sticker instead of the plastic cover on the back for easy application. Their transparent housing protects the barcode inside from scratches and allows tags to be applied to metallic and non-metallic surfaces.

EXO Slim InLine Plate tags are optionally available in a dual-frequency form combining UHF with HF/NFC on the same chip. This allows applications to take advantage of the best of both technologies: The long reading distance of UHF for logistics and the possibility to interact with an NFC enabled smartphone e.g. by a maintenance technician who does not need a dedicated RFID reader then.

In short, EXO Slim tags provide the durability of an encased RFID tag in a small footprint for harsh environments with some of the options in the range being the most rugged tags on the market, even withstanding a "sledgehammer test".



### KEY BENEFITS:

- **Durability** – Resistant to outdoor elements as well as blunt and sharp impact.
- **Versatility** – Thin plates mount flush with glue or screws to any material.
- **Visibility** – Large surface may be printed or laser-engraved with logo, barcode, serial number or text.

### TECHNOLOGY HIGHLIGHTS:

- RAIN UHF Worldwide operating frequencies from 860 to 960 MHz (off-metal) or specialized (on-metal)
- Combo option UHF with HF/NFC in the same tag
- Fully interoperable; standards-compliant
- Reliable performance on both metal and non-metal surfaces
- Waterproof under high pressure and temperature; chemical and impact resistant
- Mount with glue, nails, or screws
- Versatile print/encasement options including clear rugged covers allowing visibility of human readable print or barcode on the label itself

## APPLICATION AREAS:

### Outdoor Asset Tracking and Logistics

- Postal and road toll management: truck, wagon and train tracking
- Supply chain management: pallet and goods tracking

### Automation and Manufacturing

- Materials and inventory and tracking

### Returnable Transport Items

- Shipping container tracking








- Tracking and monitoring plastic trays used in manufacturing conveyor systems

### Waste Management

- Commercial and industrial bin identification

### Indoor Asset Tracking

- Transparent SHELL+ and SHELL tags are ideal for light duty indoor assets tracking like furniture or compartments. Supports CMMS (Computerized Maintenance Management System) via NFC

	EXO Slim						
	InLine Plate	InLine Plate Combo	800P	750P	600 SHELL+	1000 SHELL+	1200 SHELL+
							
<b>Base Model Number</b>	6C698A (EU) 6C698B (US)	6H698C	CP15940	CP16374	CP14519 (EU) CP14522 (US)	CP14531 (EU) CP14534 (US)	CP14543
<b>ELECTRONIC</b>							
<b>Operating Frequency</b>	865-868 MHz (ETSI) / 902-928 MHz (FCC)		860-960 MHz (Worldwide)		865-868 MHz (ETSI) / 902-928 MHz (FCC)		860-960 MHz (Worldwide)
<b>Chip Type</b>	Monza 4E		EM4423		M730		Monza R6-P
<b>Memory</b>	496 bit EPC + 96 bit TID + 128 bit user		1920 bit user		128 bit EPC 48 bits Unique TID		28/96 bit EPC, 32/64 bit UM
<b>Anti-Collision</b>	Yes						
<b>Reading Distance (2W reader ERP, free space)</b>	Up to 26 ft (8 m) off-metal; 20 ft (6 m) on-metal	Up to 13 ft (4 m)	Up to 26 ft (8 m)	Up to 36 ft (11 m)	Up to 25.2 ft (7.7 m)	Up to 18.3 ft (5.6 m)	Up to 34.7 ft (10.6 m)
<b>PHYSICAL</b>							
<b>Dimensions</b>	4.7 x 2.7 x 0.14 in (120 x 68 x 3.7 mm)	4.7 x 2.7 x 0.12 in (120 x 68 x 3.7 mm)	4.1 x 1.4 x 0.14 in (105 x 36 x 3.5 mm)	3.38 x 0.94 x 0.12 in (86 x 24 x 3 mm)	3.38 x 0.78 x 0.28 in (86 x 20 x 7.3 mm)	3.5 x 1.10 x 0.32 in (89 x 28 x 8.3 mm)	4.84 x 1.29 x 0.26 in (123 x 33 x 6.8 mm)
<b>Mounting Method</b>	Glue, nail or screw						
<b>Screw Fixation Hole</b>	Ø 0.16 in (4.2 mm)		Ø 0.17 in (4.4 mm)	Ø 0.12 (3.2mm)	Ø 0.12 in (3.2 mm)		
<b>Affixes To</b>	All surfaces, including metal, plastic, wood		Off Metal, plastic, wood		All surfaces, including metal, plastic, wood		
<b>Housing Material</b>	PC/ABS high impact		ABS	PC			
<b>Color</b>	Pantone warm gray 2U		Gray	Transparent			
<b>Weight</b>	1.0 oz (27 g)	1.0 oz (28 g)	0.4 oz (11.6 g)	0.24 oz (6.7 g)	0.32 oz (9 g)	0.42 oz (12 g)	0.7 oz (20 g)
<b>CHEMICAL AND MECHANICAL RESISTANCE</b>							
<b>Water</b>	IP69K, 176° F (80° C), 100 bar, 30 sek. 16 l/min		IP68, 6.6 ft. (2 m) x 24 h				
<b>Withstands Exposure To</b>	Mineral oil, petroleum, salt mist, vegetable oil		5% caustic soda, 10% salt water, vegetable oil, Motor oil 68° F (20° C), 168hr (for 800P to 1200 Shell+)				
<b>Vibration &amp; Shock</b>	IEC 68.2.6 / IEC 68.2.29		MIL-STD-810 G				
<b>Impact</b>	IEC 62262-1K06		1 kg Steel, 1m				
<b>Axial/Radial Force</b>	500 N, 10 sec						
<b>THERMAL</b>							
<b>Storage</b>	-40° to +185° F (-40° to +85° C), 1 x 1000 h		-4° to +185° F (-20° to +85° C)	-22° to +149° F (-30° to +65° C)			
<b>Operating</b>	-40° to +185° F (-40° to +85° C)		-4° to +185° F (-20° to +85° C)	-22° to +149° F (-30° to +65° C)			
<b>Shock/Fatigue</b>	-40° to +185° F (-40° to +85° C), 100 x 5 min with 30 sec transition						
<b>OTHER</b>							
<b>Standards</b>	UHF EPC Class 1 Gen 2, ISO 18000-6C, ISO 17364	UHF EPC Class 2 Gen 2, ISO 18000-63, ISO 14443A - NFC Tag Type 2	UHF EPC Class 1 Gen 2, ISO 18000-6C, ISO 17364				
<b>Options</b>	Embossing or laser-engraving of logo, barcode or text. (Standard tags have no laser-engraving.)			Printing, encoding.		Also available as SHELL with adhesive liner instead of hard back cover. See individual spec sheet for details	
<b>Box Size</b>	240 pcs.		720 pcs.	1344 pcs.	936 pcs.	810 pcs.	448 pcs.
<b>Warranty</b>	2 Years						

