Poly Tag®

Low and high frequency discshaped RFID tags with extreme impact resistance, ready for outdoor use



Poly Tag passive contactless radio frequency identification (RFID) transponders deliver reliable performance in a cost-effective housing that stands up to rugged conditions. Each heavy-duty disc is waterproof, highly chemical and shock resistant, and withstands peak temperatures up to 266° F (130° C). The yellow Poly-Tag versions are flame resistant according to UL 94 V-0 and available with ATEX/IECEX certificates for use in potentially explosive environments of mining, gas and dust. Blank yellow version may be laser engraved according to customer's certifications as needed.

Poly Tag devices are housed in field-proven, high-impact PA6. This nylon thermoplastic shell absorbs the daily bumps and jolts of industrial environments, while protecting the electronics within.

Exceptional toughness, chemical resistance and abrasion resistance assure consistent communications with RFID readers, and reliable performance in automation and manufacturing applications.

Low frequency (LF) Poly Tag discs perform on any flat surface. They offer reliable, cost-effective tagging for near-proximity reader applications, with available data storage of 64-bit user capability.

The high frequency (HF) Poly Tag disc offers anti-collision technology for faster data processing, higher user memory, and an improved read range over LF discs. Chip options for NFC or HID Trusted Tag® are available to implement secure "proof of presence" applications like guard tours or maintenance checks using standard NFC phones as readers.

For additional disc-tag options, the HID IN Tag[™] family also includes heavy-duty tags, in low frequency, high frequency and UHF configurations. For other applications, consider ultra-thin HID Epoxy Disc or indoor World Tag[™] transponders.



KEY BENEFITS:

- Durable housing withstands shock, impact and vibration; waterproof; resistant to chemical exposure
- ATEX/IECEX certified flame resistant options for use in hazardous environments
- Heat tolerant during storage, industrial processing and daily use
- Versatile mounts securely to plastic or wood with screws
- Cost-effective excellent size to performance ratios

APPLICATION AREAS:

Automation and manufacturing

- Processing boxes
- · Production equipment
- Maintenance and Inspection

ASSET TRACKING AND LOGISTICS

- Outdoor equipment e.g. furniture, playground items, or walls
- Oil & Gas, mining industry
- Plastic bins
- Proof of Presence (e.g. guard tour)



Base Model Number 601131-010 629131-012 629131-014 629131-014-EX 645131-101 649131-010		Poly Tag®					
Part		0	0	0	(0)	0001371	0
Operating Frequency	Base Model Number	601131-010	629131-012	629131-014	629131-014-EX	6H5131-101	6H9131-010
Memory 64 bit read-only 2560 bit user memory 8 kB 888 Bytes user memory 8 kB 8 kB kB 8 kB kB 8 kB kB kB 8 kB kB kB 8 kB kB kB kB 8 kB		ELECTRONIC					
Memory	Operating Frequency	125 kHz 13.56 MHz					
Anti-Collision No Yes No No Proximity No No No No No No No N	Chip Type	Unique	ICODE SLIX2			HID Trusted Tag	NTAG 216
Proximity (NFC Tap)	Memory	64 bit read-only	2560 bit user memory			8 KB	
PHYSICAL	Anti-Collision	No	Yes				
Dimensions Di.3.4 x 0.31 in (Ø 34 x 8 mm)	Reading Distance	Dependent upon reader, environment and application Proximity (NFC Tap)					
Mounting Method Screw-on Fixation Hole Size Ø 0.22 in (5.6 mm) Plastic, wood, glass, metal PA6 - high impact - glass fiber reinforced Color Black Yellow Black Péd-high impact - glass fiber reinforced PA6 - high impact - glass fiber reinforced PA6 - glass fiber reinforced		PHYSICAL					
Fixation Hole Size	Dimensions	Ø 1.34 x 0.31 in (Ø 34 x 8 mm)					
### Affixes To Plastic, wood, glass, metal PA6 - high impact - glass fiber reinforced PA6 - high impact	Mounting Method	Screw-on					
Housing Material PA6 - high impact - glass fiber reinforced Color Black Yellow Black Weight 2.7 oz (7.8 g)	Fixation Hole Size	Ø 0.22 in (5.6 mm)					
Color Black Yellow Black Weight 2.7 oz (7.8 g)	Affixes To	Plastic, wood, glass, metal					
Weight 2.7 oz (7.8 g) CHEMICAL AND MECHANICAL	Housing Material	PA6 - high impact - glass fiber reinforced					
CHEMICAL AND MECHANICAL Water IP69K, IP68, 68° F (20° C), 3.3 ft (1 m) x 24 h Withstands Exposure To Mineral oil, petroleum, salt water, vegetable oil; 90% humidity at 194° F (90° C) Flame resistance UL 94 HB UL 94 V-0 UL 94 HB With a standards UL 94 V-0 UL 94 HB WIL 94 V-0 UL 94 HB UL 94 V-0 UL 94 HB UL 94 V-0 UL 94 V-0 UL 94 V-0 UL 94 V-0 UL 94 V-0 <th>Color</th> <th colspan="4"></th> <th colspan="2">Black</th>	Color					Black	
Water IP69K, IP68, 68° F (20° C), 3.3 ft (1 m) x 24 h Withstands Exposure To Mineral oil, petroleum, salt water, vegetable oil; 90% humidity at 194° F (90° C) Flame resistance UL 94 HB UL 94 V-0 UL 94 HB Vibration IEC 68.2.6 [10 g, 10 to 2000 Hz, 3 axis, 2.5 h] UL 94 V-0 UL 94 HB Shock IEC 68.2.29 [40 g, 18 ms, 6 axis, 2000 times] Axial / Radial Force 800 N / 500 N, 10 sec Impact IEC 62262-IK07 Drop Test 100 x 5.9 ft (1.8 m) THERMAL Storage 40° to +194° F (-40° to +90° C), 1000 h Operating 40° to +185° F (-40° to +90° C), 1000 h Shock/Fatigue -22° to +194° F (-30° to +90° C), 50 x 10 min with 30 sec transition Peak 212° F (100° C), 100 h OTHER ISO/IEC 14443A, NFC Forum Tag Type 4 NFC Forum Tag Type 4 Type 4 Type 2 Certifications Atternative chips e.g. MIFARE® Classic, MIFARE® DESFire®, custom logo or color, laser engraved serial number Box Size 800 pcs.	Weight	2.7 oz (7.8 g)					
Withstands Exposure To Mineral oil, petroleum, salt water, vegetable oil; 90% humidity at 194° F (90° C) Flame resistance UL 94 HB UL 94 V-0 UL 94 HB Vibration IEC 68.2.6 [10 g, 10 to 2000 Hz, 3 axis, 2.5 h] UL 94 V-0 UL 94 HB Shock IEC 68.2.2 [10 g, 10 to 2000 Hz, 3 axis, 2.5 h] Axial / Radial Force 800 N / 500 N, 10 sec Impact IEC 62262-IK07 Drop Test 100 x 5.9 ft (1.8 m) THERMAL Storage -40° to +185° F (-40° to +90° C), 1000 h -40 *to +185° F (-40° to +85° C) -13° to +185° F (-25° to +35° C) -13° to +158° F (-25° to +70° C) Shock/Fatigue -22° to +194° F (-30° to +90° C), 50 x 10 min with 30 sec transition Peak OTHER ISO/IEC 14443A, NFC Forum Tag Type 4 ISO/IEC 14443A, NFC Forum Tag Type 4 Type 4 ISO/IEC 14443A, NFC Forum Tag Type 4 ATEX, IECEx, UKEX Options Alternative chips e.g. MIFARE® Classic, MIFARE® DESFire®, custom logo or color, laser engraved serial number Box Size		CHEMICAL AND MECHANICAL					
Flame resistance	Water						
Vibration IEC 68.2.6 [10 g, 10 to 2000 Hz, 3 axis, 2.5 h] Shock IEC 68.2.29 [40 g, 18 ms, 6 axis, 2000 times]							
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Axial / Radial Force 800 N / 500 N, 10 sec							
Impact IEC 62262-IK07 100 x 5.9 ft (1.8 m) THERMAL Storage -40° to +194° F (-40° to +90° C), 1000 h -40° to +176° F (-40° to +85° C) (-25° to +85° C) (-25° to +85° C) (-25° to +70° C) Shock/Fatigue -22° to +194° F (-30° to +90° C), 50 x 10 min with 30 sec transition Storage Storage ISO/IEC 14443A, NFC Forum Tag Type 4 Type 2 Storage							
Drop Test 100 x 5.9 ft (1.8 m) THERMAL Storage -40° to +194° F (-40° to +90° C), 1000 h -40° to +196° F (-40° to +85° C) -40° to +176° F (-40° to +80° C) -13° to +185° F (-25° to +85° C) -13° to +185° F (-25° to +85° C) (-25° to +85° C) -25° to +70° C							
THERMAL Storage -40° to +194° F (-40° to +90° C), 1000 h -40° to +176° F -13° to +185° F (-40° to +85° C) -40° to +85° C) -40° to +85° C) -13° to +185° F (-25° to +85° C) -13° to +158° F (-25° to +70° C) -25° to +70° C) -22° to +194° F (-30° to +90° C), 50 x 10 min with 30 sec transition							
Storage	Drop lest						
Operating -40 °to +185° F (-40° to +85° C) -40 °to +176° F (-40° to +80° C) -13° to +185° F (-25° to +70° C) Shock/Fatigue -22° to +194° F (-30° to +90° C), 50 x 10 min with 30 sec transition Peak 212° F (100° C), 100 h OTHER ISO/IEC 14443A, NFC Forum Tag Type 4 ISO/IEC 14443A, NFC Forum Tag Type 4 Certifications ATEX, IECEx, UKEX Options Alternative chips e.g. MIFARE® Classic, MIFARE® DESFire®, custom logo or color, laser engraved serial number Box Size 800 pcs.	04						
Caperating Cap	Storage		+90° C), 1000 h		40 %- 1176% F	100 +- 11050 5	100 - 1100 5
Shock/Fatigue -22° to +194° F (-30° to +90° C), 50 x 10 min with 30 sec transition Peak 212° F (100° C), 100 h OTHER Standards ISO 15693, ISO 18000-3, NFC Type 5 ISO/IEC 14443A, NFC Forum Tag Type 4 ISO/IEC 14443A, NFC Forum Tag Type 4 ISO/IEC 14443A, NFC Forum Tag Type 2 Certifications Alternative chips e.g. MIFARE® Classic, MIFARE® DESFire®, custom logo or color, laser engraved serial number Box Size 800 pcs.	Operating						
Peak 212° F (100° C), 100 h OTHER Standards ISO 15693, ISO 18000-3, NFC Type 5 Certifications ATEX, IECEx, UKEX Options Alternative chips e.g. MIFARE® Classic, MIFARE® DESFire®, custom logo or color, laser engraved serial number Box Size 800 pcs.	Shock/Fatigue		+90° C), 50 x 10	min with 30 sec t		((1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
OTHER Standards ISO 15693, ISO 18000-3, NFC Type 5 ISO/IEC 14443A, NFC Forum Tag Type 4 NFC Forum Tag Type 4 Type 2 Certifications Options Alternative chips e.g. MIFARE® Classic, MIFARE® DESFire®, custom logo or color, laser engraved serial number Box Size 800 pcs.							
Standards ISO 15693, ISO 18000-3, NFC Type 5 NFC Forum Tag Type 4 NFC Forum Tag Type 2 Certifications ATEX, IECEx, UKEX Options Alternative chips e.g. MIFARE® Classic, MIFARE® DESFire®, custom logo or color, laser engraved serial number Box Size 800 pcs.							
Options Alternative chips e.g. MIFARE® Classic, MIFARE® DESFire®, custom logo or color, laser engraved serial number Box Size 800 pcs.	Standards		ISO 15693, ISO	18000-3, NFC Ty	pe 5	NFC Forum Tag	NFC Forum Tag
Box Size 800 pcs.	Certifications				ATEX, IECEx, UKEX		
	Options	Alternative chips e.g. M	IFARE® Classic,	MIFARE® DESFir	e®, custom logo or co	lor, laser engraved se	erial number
Warranty 2 Years	Box Size	800 pcs.					
	Warranty	2 Years					





I M1 Ex ia I Ma II 1 G Ex ia IIC T6 Ga II 1 D Ex ia IIIC T85°C Da -60°C ≤Tamb ≤ +75°C







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