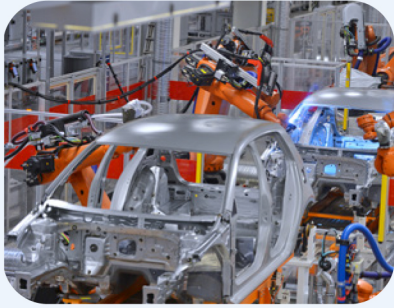


# IQ Pro Label

## Durable RFID labels for special applications



IQ Pro labels represent high-end, durable RAIN® RFID UHF tags for applications with special needs, where standard on- or off-metal labels would not be sufficient.

The IQ Pro HT label portfolio can withstand exposure to high temperatures, chemicals, pressure and torsion, with uncompromised performance.

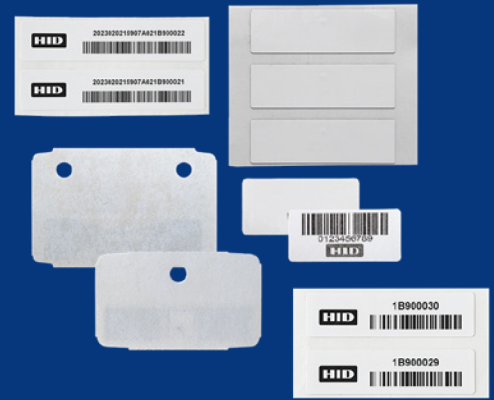
Originally designed for the automotive industry, these High Temperature (HT) labels help identify and track each vehicle both during assembly and throughout its life on the road. Lifetime traceability of auto parts and components enables more accurate and efficient records which can help automakers expedite service in the event of a recall.

HT Labels deliver consistent and reliable readability during the rigors of auto manufacturing, including welding operations, autoclaves, anti-corrosive electrolyte baths, cycles of paint layer application, and drying ovens that exceed 400° F (200° C).

Resistance to severe physical, mechanical and thermal environments makes this portfolio of tags ideal for all types of manufacturing, logistics and inventory control operations, especially tracking both work-in-progress and finished goods for various products such as industrial tools, medical trays, heavy equipment, car and aerospace components, cargo containers, and even blade and rack servers.

Custom form factors can be produced to meet specific needs. They may also be laser imprinted with barcodes, QR codes or text, enabling visual systems to work in combination with advanced RFID capabilities.

The thin IQ Pro 400 PC is optimized for non-metallic flat or slightly curved surfaces e.g. plastic waste bins or food crates. Its special polycarbonate construction ensures a higher durability and UV resistance compared to traditional label designs. Optional laser marking is performed into the structure of the tag to make it permanent and scratch resistant. The IQ Pro 400 PC is delivered as single pieces with strong adhesive and easy peel off tape for fast mounting. The polyimide construction of the IQ Pro 400P, 750P and 800P labels make them highly chemical resistant and thus ideal for plastic returnable transport items. Optionally they can be upgraded with an additional protective layer to add resistance to Ketones, Alkalis and Halogens on top.



### KEY BENEFITS:

- **High heat resistance** – some models endure up to 446° F (230° C)
- **Impermeable** – repel moisture, oils, petroleum and salt mist
- **Flexible** – tolerate bending and torsion with uncompromised performance

### KEY TECHNOLOGY HIGHLIGHTS:

- Broadband worldwide operating frequency, 865 to 956 MHz
- Some models perform from -40° to +446° F (-40° to +230° C)
- Highly resistant to water, oils, petroleum, salt mist, etc.
- Thickness down to 0.02 in (0.5 mm)
- Bendable and durable
- EPC Global Class 1 Gen 2, ISO 18000-6C

### TYPICAL APPLICATION AREAS:

Automation and manufacturing

- Automotive
- Aerospace
- Machinery

Asset tracking and logistics

- Waste Management
- Container tracking
- Returnable Transport Items

	400P HT	800P HT	400P	750P	800P	400 PC
<b>Base Model Number</b>	CP16134	CP13445	CP17125	CP17253	CP17142	6H2P10
<b>ELECTRONIC</b>						
<b>Operating Frequency</b>	865-928 MHz (Global)					
<b>Chip Type</b>	M730					Monza R6-P
<b>Memory</b>	128 bit EPC					128/96 bit EPC, 32/64 bit UM
<b>Anti-Collision</b>	Yes					
<b>Reading Distance 2 W reader ERP, free space</b>	Up to 13.1 ft (4 m)	Up to 39.3 ft (12 m)	Up to 19.6 ft (6 m)	Up to 39.3 ft (12 m)	Up to 49.2 ft (15 m)	Up to 13.1 ft (4 m)
<b>PHYSICAL</b>						
<b>Dimensions</b>	2 x 1.2 x 0.02 in (50 x 30 x 0.5 mm)	3.3 x 2.2 x 0.02 in (85 x 55 x 0.5 mm)	1.8 x 0.5 in (46.45 x 12.32 mm)	2.3 x 0.7 in (60 x 18 mm)	3.7 x 0.8 in (95 x 21 mm)	2 x 0.9 x 0.03 in (50 x 24 x 0.7 mm)
<b>Mounting Method</b>	Screw, rivet, metal fasteners		Self-adhesive			Solvent based Acrylic adhesive
<b>Fixation Hole Size</b>	Ø 0.1 in (2.5 mm) x 1	Ø 0.14 in (3.5 mm) x 2	(None)			
<b>Affixes To</b>	Plastic and non-metallic substrates		Non-metallic surfaces			
<b>Housing Material</b>	High temperature synthetic label		Polyimide - optionally available with added chemical resistant layer for Ketones, Alkalis and Halogen exposure*			Polycarbonate
<b>Color</b>	White					
<b>Weight</b>	0.02 oz (0.5 g)	0.05 oz (1.5 g)	0.02 oz (0.46 g)	0.02 oz (0.7 g)	0.03 oz (0.9 g)	0.03 oz (0.9 g)
<b>CHEMICAL AND MECHANICAL RESISTANCE</b>						
<b>Water</b>	IP68, 68° F (20° C), 3.3 ft (1 m) x 24 h					
<b>Withstands Exposure To</b>	Mineral oil, 5% caustic soda, 10% salt water, vegetable oil	Resistance to harsh chemicals used for cleaning plastic RTI: Alcohols, Acids, Quaternary ammonium compounds (6.3%), Ketones*, Alkalis* (5~10%), and Halogens*				Mineral oil, petroleum, salt mist, vegetable oil, HCL (10%), Bleach (5%); UV light
<b>Environmental Test Conditions</b>	68° F (20° C), 100 h					
<b>Axial / Radial Force</b>						1000 N, 10 sec
<b>Bending</b>						5x500 each side, 27 mm radius; 500 each side, 45° twist
<b>THERMAL</b>						
<b>Storage</b>	-40° to +185° F (-40° to +85° C)					-22° to +176° F (-30° to +80° C)
<b>Operating</b>	-40° to +185° F (-40° to +85° C)					-22° to +176° F (-30° to +80° C)
<b>Shock/Fatigue</b>	-40° to +185° F (-40° to +85° C), 100 x 5 min with 30 sec transition					-22° to +176° F (-30° to +80° C), 100 x 5 min with 30 sec transition
<b>Peak</b>	446° F (230° C), 1 h		392° F (200° C), 30 Min.			212° F (100° C), 100 h
<b>OTHER</b>						
<b>Standards</b>	UHF EPC Class 1 Gen 2, ISO 18000-6C, RAIN					
<b>Options</b>	Printing (Operational Temperature); encoding; ATEX/IECEX; C1D1			Printing, encoding, ATEX/IECEX; C1D1		Laser engraving, printing, encoding
<b>Box Size</b>	1,000 pcs.					3,000 pcs.
<b>Warranty</b>	2 Years					

