IQ Pro Label

Durable RFID labels for special applications



IQ Pro labels represent highend, durable RAIN 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, anticorrosive 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 workin-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 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
	12701-1200		1 1000000 1 1000000 1 1000000 1 10000000		RESIDENT AND ADMITS
Base Model Number	CP16134	CP13445	CP17125	CP17253	CP17142
	ELECTRONIC				
Operating Frequency	865-928 MHz (Global)				
Chip Type	M730				
Memory	128 bit EPC				
Anti-Collision	Yes				
Reading Distance 2 W reader ERP, free space	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)
	PHYSICAL				
Dimensions	2 × 1.2 × 0.02 in (50 × 30 × 0.5 mm)	3.3 × 2.2 × 0.02 in (85 × 55 × 0.5 mm)	1.8 × 0.5 in (46.45 × 12.32 mm)	2.3 × 0.7 in (60 × 18 mm)	3.7 × 0.8 in (95 × 21 mm)
Mounting Method	Screw, rivet, metal fastners Self-adhesive				
Fixation Hole Size	Ø 0.1 in (2.5 mm) x 1	Ø 0.14 in (3.5 mm) x 2	(None)		
Affixes To	Plastic and non-metallic sul	ostrates	Non-metallic surfaces		
Housing Material	High temperature synthetic	label	Polyimide - optionally available with added chemical resistant layer for Ketones, Alkalis and Halogen exposure*		
Color	White				
Weight	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)
	CHEMICAL AND MECHANICAL RESISTANCE				
Water	IP68, 68° F (20° C), 3.3 ft (1 m) x 24 h				
Withstands Exposure To	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				
Environmental Test Conditions	68° F (20° C), 100 h				
Axial / Radial Force					
Bending					
	THERMAL				
Storage	-40° to +185° F (-40° to +85° C)				
Operating	-40° to +185° F (-40° to +85° C)				
Shock/Fatigue	-40° to +185° F (-40° to +85° C), 100 x 5 min with 30 sec transition				
Peak	446° F (230° C), 1 h 392° F (200° C), 30 Min.				
	OTHER				
Standards	UHF EPC Class 1 Gen 2, ISO 18000-6C, RAIN				
Options	Printing (Operational Temperature); encoding; ATEX/ IECEX; C1D1 Printing, encoding, ATEX/IECEX; C1D1				
Box Size	1,000 pcs.				
Warranty	2 Years				









For more information, contact tagsales@hidglobal.com

