RFID SOLUTIONS

Automation & Manufacturing
Manufacturing today is increasingly sophisticated, involving complex, automated procedures. With this sophistication has come a greater need to monitor products as they go through the production process to achieve efficiencies that lower operating costs. Along with other elements of an automation solution, HID Global’s RFID tags enable data to move with a product, adding information as the product travels through the manufacturing process or monitoring the performance and repair history of the manufacturing equipment. The tags also track rework, conversions and personalization, as well as monitor failure data and quality measures. Not only does this improve the security and management of a company’s inventory, but it also helps to avoid the cost of scrapping products that deviate from defined procedures or are victims of human error.

**Improve decision making with more data.**
Good information leads to good decision making. Tracking data on assembly line equipment can help you arrive at more immediate, more strategic decisions for your company. Why not take advantage of information already available? RFID tags from HID Global help you collect and maintain data on subcomponents within complex products or gather information from the production line control system. This greater intelligence helps you improve future decision making and achieve a maximum return on your investment. It also enhances your record keeping for warranties or possible litigation, as critical information on each item is stored with the product and retrieved as needed during or after the manufacturing process. Data collected can even lead to process changes such as greater automation, resulting in improved business performance, inventory tracking and quality control. The result is a stronger competitive advantage.

**Save costs and reduce waste.**
HID Global can help you enhance the efficiencies of your operations. By learning more about your automation processes, you can reduce errors along the production line. Reduced errors mean less waste and better control of supplies and inventory. More efficient manufacturing leads to a lower rate of yield loss as well as a reduced head count, both of which save you money. In addition to keeping track of your inventory and helping you avoid unnecessary losses, RFID tags keep accurate records of the tools used in your manufacturing processes and the maintenance schedules of those tools, optimizing the equipment for a longer life.

**HISTORY OF INNOVATION**
Despite the broadest tag portfolio for automation and manufacturing in the industry, at any point in time, HID Global is working on dozens of custom development projects for automation customers. With a long history of innovation, HID’s expertise in designing transponders for unique application requirements is unparalleled.
Benefit from durable tags. RFID tags from HID Global are durable enough for the most demanding applications. They work in metallic environments and can withstand extreme temperatures, harsh chemicals and rough handling often found in high-volume manufacturing facilities or during transportation. They can be read quickly, in proximity, as products speed by on an assembly line, even through special packing materials. This is especially useful in large manufacturing organizations when automation is critical to achieving higher efficiencies. Our tags also adhere to the standards of ISO 15693 or UHF EPC Class 1 Gen 2, including its anti-collision requirements, and can be created to read in almost a 360 degree circle. HID tags can be provided UV-, flame- or radiation-resistant and food compatible. Memory capacity may go up to 8 Kilobytes - the maximum specified by ISO/IEC 15693.

Achieve high quality control standards. With the eyes of the world focused on quality, RFID tags help you ensure the highest quality in your product processes. RFID transponders from HID Global enable compliance with total traceability requirements for products throughout your manufacturing process. You will know the number of parts you should have at the end of the line automatically, in real-time, making life cycle management more efficient. This will decrease the number of misplaced parts or the need for manual correction. Because each tag is linked to a database that holds information on every product, you know where the item was produced, which components went into each product, what day and time a product went through each production process and who was involved in the assembly line. This enables you to stand behind your warranties with greater confidence.

Consider custom tags. HID Global offers a wide range of finished RFID tags, from standard tags enhanced with special features to completely customized RFID tags. Our standard portfolio of tags fulfills 80 percent of all needs, but when customization is required, HID Global works in collaboration with our original equipment manufacturer (OEM) partners to produce special tags for special needs. Our experience and flexibility enable us to provide tags with unique housing or performance parameters or tags that simply feature custom logos or special identification to help OEMs differentiate themselves in the market. We select the right integrated circuit for each application according to performance, features and cost parameters.

We provide flexible support for OEMs. HID Global works effectively with OEMs, including those who require specific customization such as printing, additional testing, packaging and quality audits. We bring new ideas and solutions to the table, along with technical expertise, to provide unique, customized products to our partners quickly.

### Product Name

<table>
<thead>
<tr>
<th>Product Name</th>
<th>IN Tag 200/300/500</th>
<th>IronTag&lt;sup&gt;®&lt;/sup&gt;</th>
<th>Poly Tag 340</th>
<th>High-Temperature Label</th>
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<tbody>
<tr>
<td><strong>Application</strong></td>
<td>Ruggedized discs for severe industrial environments, flame resistant and food compatible</td>
<td>Highly robust compact UHF on-metal tag, with temperature resistance up to 428°F / 220°C</td>
<td>Durable tag for outdoor or on-metal use requiring extreme impact resistance</td>
<td>Laser engravable, flexible UHF tag resisting temperatures up to 446°F / 230°C</td>
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<tr>
<td><strong>Frequency</strong></td>
<td>125 kHz / 13.56 MHz / 865 MHz (EU) / 915 MHz (US)</td>
<td>865 MHz (EU) / 915 MHz (US)</td>
<td>125 kHz / 13.56 MHz</td>
<td>860 - 960 MHz (Worldwide)</td>
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<tr>
<td><strong>Read Range</strong></td>
<td>Read range is highly dependent upon multiple parameters including reader, environment and application. HID Global tags are tested and proven to be at the top of their class.</td>
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HID Global will work with you to provide the best solutions for your automation and manufacturing identification needs. With many years of manufacturing experience, we understand your requirements and expectations. We work in close cooperation with system integrators around the world to develop systems that meet your most stringent demands. Whether you need standard or customized tags, we can deliver the products you need with exceptional quality and service.

HID Global has over 45 years of manufacturing experience and over 20 years of expertise in contactless technology development and manufacturing. Users and developers worldwide rely on the product line from HID Global for responsive solutions, fast turnaround, dependable quality and exceptional performance.

Our production facilities are ISO9001-2008 certified. Key procedures relating to business and quality systems are continually monitored for ongoing improvement which results in the highest quality of products for customers.