



Animal ID

RFID Solutions





Integrated RFID tracking systems can increase productivity through monitoring and nutritional controls, protect livestock from the threat of disease and ensure safety through precisely controlled processing and distribution.

Safeguarding livestock and companion animals



MANAGING ANIMALS

As commerce becomes increasingly global, the task of tracking and managing animals and food products becomes ever-more critical and challenging. Animals cannot be stacked and stored like other products. They may be transported over long distances, often mingling with others from different locations. And farm animals, zoo animals and household pets alike are all potential carriers of diseases that can threaten animal and human health and lives.

As with animals, tracking food products through processing and transport contributes to consumer health by identifying both product origins and possible problems in processing, handling, or transport. Aside from health concerns, tracking can also be critical for animals and food products that are particularly valuable or that require special protection.

HID is a world leader in the development of secure contactless radio frequency identification (RFID) technology used to manage and safeguard critical assets like these. HID provides a full range of specialized RFID tags for use in managing farm, laboratory, exotic, and companion animals.

Our innovative products meet all applicable standards and regulations and are fully interoperable with other standardized components and systems.

MEETING MARKET DEMANDS

HID has long recognized consumers' concerns regarding food safety and quality. Farmers and processors have implemented rigorous systems for meeting consumer demands, but one of the biggest challenges has been tracking individual animals. This is critical for pinpointing animal origins, controlling the spread of disease, preventing fraud, and managing costs. In addition, national and regional bodies have implemented strict regulations for the handling of animals and animal-based food products.

Animals pass through many hands as they move from farm to exporter to auction house to processor. Because their movement cannot be precisely controlled, older visual technologies like tattoos and non-electronic ear-tags made tracking difficult. Secure contactless identification technologies supplement or augment these existing technologies, allowing animals to be tagged with RFID transponders and be identified even where direct line-of-sight is not practical.

ESTABLISHING GLOBAL STANDARDS

The effectiveness of RFID technology depends on establishment of, and compliance with, global standards. The memory coding structure and communication protocols for RFID tags in the animal market are defined by ISO standards 11784 and 11785. As a member of the ISO committee responsible for these standards, HID has been in the forefront of their development and implementation and is committed to ongoing standardization of contactless technologies.

NON-TRADITIONAL APPLICATIONS

While livestock and pet identification are the most obvious applications for this technology, other applications are growing in importance. These include tagging zoo and laboratory animals as well as fish and birds. Secure identification of animals helps ensure the validity of research. It helps identify lost or stolen animals and aids in their return. It helps track animals' veterinary history, ensure proper care, and prevent the spread of disease. In the European Union, chips implanted under the skin of pets, coupled with an EU pet passport, permits travel of animals among EU member states without quarantine.

A WORLD OF OPTIONS

Effective contactless identification requires the right tools for each application. HID offers RFID tags designed to meet virtually any need. Transponders can

be incorporated into ear tags or paturon (ankle) bands for combined visual/radio frequency applications. Glass tags are sized from 4 mm diameter for large animals like cattle down to 1.2 mm for small animals like mice and snakes. The smaller versions can be safely and permanently injected subcutaneously larger glass tags are embedded in an ear tag or a ceramic bolus permanently placed into an animal's stomach. The HID Glass Tag with Temperature Sensor is an advanced solution designed for precise temperature monitoring in animal health applications, achieving an impressive accuracy of ± 0.2 °C post-calibration. This tag is ideal for PET health monitoring and veterinary use, empowering users to track animal well-being effectively. These ISO-compliant devices operate at 134.2 KHz (low frequency - LF) and are available in read-only or one-time-programmable (OTP) configurations in FDX or HDX. Where appropriate, implanted transponders are parylene coated to prevent migration inside the animal.

HID is committed to the advancement of contactless automatic identification and data capture (AIDC) technologies. Our automated production lines and high-volume production capabilities are unmatched in the industry. With multiple ISO 9001:2015 and CC EAL 5+ certified manufacturing plants, we produce over 250 million units a year. Our R&D capabilities are second to none, and we work as a trusted advisor to end-users, developers, equipment suppliers, and system integrators to identify emerging needs and develop innovative solutions.



TSL 2173 / 1153
wearable RFID reader



TSL 3166 rugged
RAIN RFID reader



HID RAIN Ear Tag



RAIN® LIVESTOCK MANAGEMENT

RAIN RFID products are based on ultra-high frequency (UHF) technology and allow much greater reading distance than low-frequency (LF) products, but are more sensitive to water and require different reading technology and data standards. The RAIN management ear tag by HID, extends the traditional low-frequency Animal Identification schemes with a new long-range UHF option up to 6.5m (21 ft).

Such a tag enables livestock like cattle to be automatically counted and identified when walking through a reader gate or entering a feeding station. It allows identifying and counting animals in groups from a distance using handheld readers like shown above, reducing stress to the animals.

CONSIDER HID YOUR SOLUTION PROVIDER.

Proven Performance

HID has over 50 years of manufacturing experience and over 30 years of expertise in contactless technology development and manufacturing. Users and developers worldwide rely on HID for responsive solutions, fast turnaround, dependable quality, and exceptional performance.

Customization Options

At HID, we work as a trusted advisor with customers and system integrators to develop state-of-the-art systems to meet the most stringent real-world demands. Our components are fully compatible with the widest range of readers and back-end data systems and can be customized to meet partner requirements.



RFID technology from HID can help identify lab animals, prevent the spread of disease and even track a pet's veterinary history.



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