



Tiny Tag, Big Impact: **HID HF RFID** Innovation

SMART IDENTIFICATION IN THE SMALLEST FORM

In a world where precision and miniaturization are key, our 5mm x 5mm Sentry HF RFID tag—built directly on a PCB—offers a breakthrough in compact, intelligent contactless identification. Designed for seamless integration into even the smallest items, this tag enables reliable communication at 13.56 MHz, making it ideal for applications where space is limited but performance is critical.

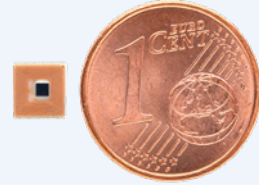
Unlike traditional RFID solutions, this tag combines the robustness of PCB technology with the convenience of passive HF RFID. It operates without a battery, ensuring maintenance-free functionality and long-term reliability. Whether embedded in surgical instruments, industrial tools, or consumer products, it brings intelligence and traceability to objects that were previously too small to tag.

The PCB-based design not only ensures durability in demanding environments—such as sterilization cycles or mechanical stress—but also allows for cost-effective mass production. This makes it a practical choice for manufacturers looking to scale smart features across their product lines.

Applications & Value Across Industries

VERSATILE INTEGRATION FOR SMARTER PRODUCTS

In medical environments, this tiny RFID tag can be embedded directly into surgical tools or diagnostic devices. It enables automatic machine setup by identifying instruments and configuring equipment accordingly, reducing human error and improving workflow efficiency. It also supports sterilization tracking and inventory management, helping hospitals maintain compliance and optimize usage.



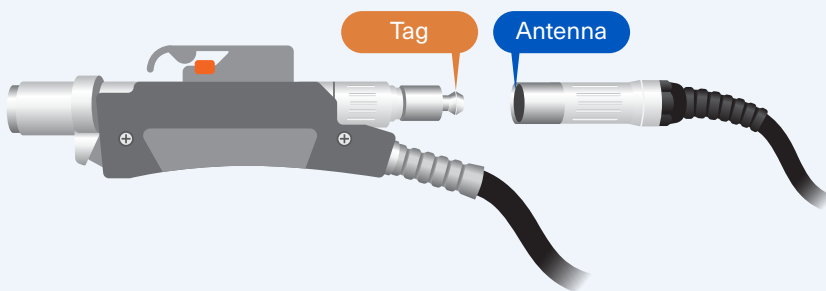
In industrial settings, the tag can be used to authenticate tools, log maintenance history, and automate production line changes. Its small footprint allows it to be hidden within the tool itself, providing secure and tamper-proof identification without interfering with functionality.

For consumer products, especially toys and collectibles, the tag opens new possibilities for personalization, interactive features, and digital connectivity. It can also serve as a powerful tool for brand protection, ensuring authenticity and enhancing customer trust.

Despite its size, the tag offers impressive performance. With a read range of up to 5 cm depending on the reader and antenna configuration, it supports ISO/IEC 15693 standards and can be customized to meet specific memory and layout requirements.

LET'S BUILD SMARTER TOGETHER

Whether you're designing next-generation medical devices, automating industrial processes, or creating connected consumer experiences, this tiny HF RFID tag is your gateway to smarter, more efficient products. And for applications requiring longer read ranges or different frequency environments, HID also offers **ultra-compact UHF RFID tags built on PCB**, combining the same ruggedness and miniaturization with the extended capabilities of UHF technology.



This tiny tag is an example of high-tech HID engineering and manufacturing capabilities. As use cases vary, so can our tags. Even smaller designs like 3x3mm or different chips with radiation resistance or crypto functions are possible.

Contact us at tagsales@hidglobal.com to explore integration options, request samples, or discuss custom designs tailored to your needs!



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