

# AccuDrawer RFID Upgrade Kit

**10X**  
IMPROVED  
SENSITIVITY\*



## Why upgrade?

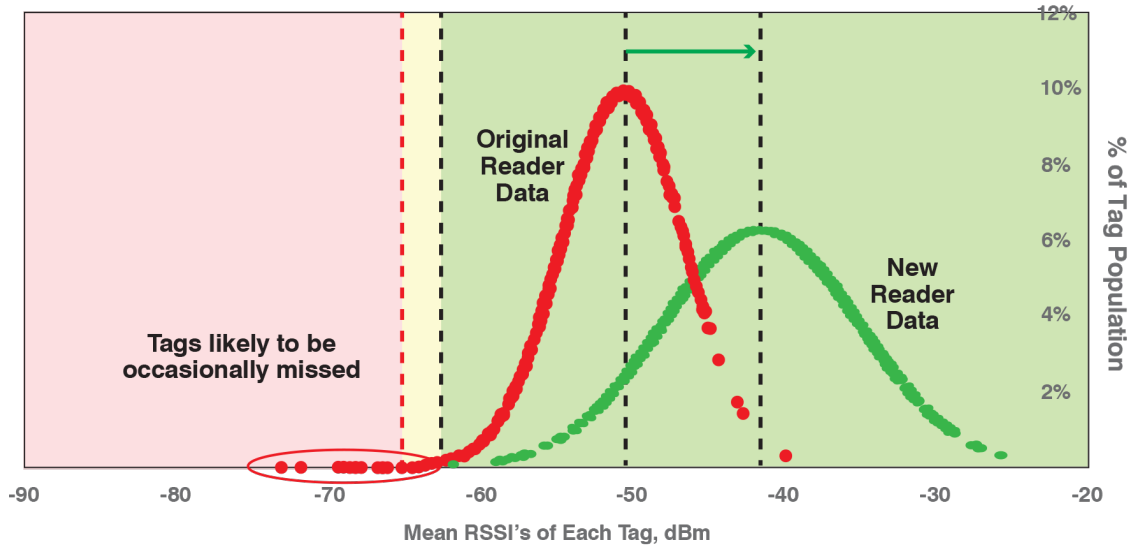
Conventional fixed RFID readers struggle to read RFID tags in tool storage applications where drawers are not organized properly because of the RFID dead spots created. Additionally, RFID tag performance can degrade over time, making their RFID signals weaker and inconsistent.

Using award winning technology and advanced signal processing algorithms, PervasID ultra-high frequency (UHF) passive RFID readers are designed to dynamically eliminate dead spots, resulting in 99%+ accurate tag detection in real-time.\*\*

*Click [HERE](#) for more information regarding AccuDrawer RFID Upgrade Kit*



**Increasing average tag strength by 10dB lowers the number of tag reads likely to be missed\*\***



- Tag Read Data recorded using factory installed Impinj® R420 RFID reader
- Tag Read Data recorded using replacement PervasID 9200 RFID reader

\* AccuDrawer Gen4 performance data compared to original factory-installed Impinj® R420 RFID reader under identical. Impinj® is a trademark of Impinj, Inc., which has not endorsed, approved, or sponsored this product.

\*\* Results obtained through internal CribMaster comparison testing performed using crib 8500, an AccuDrawer Gen 4 containing 600 tools organized in foam in each drawer

## Improved Quality of Detection

Through thousands of scans on dozens of cabinets, CribMaster has found that tags with a mean RSSI greater than -65 dBm have proven to be detectable even when tool spacing, or orientation are not exactly the same each time a tool is placed in the cabinet. This is the benchmark for configuring CribMaster RFID products.

## Features & Benefits

- Enables the use of RFID tags as small as 0.48 x 0.12 x 0.09 in. allowing up to 600 tools to be stored in a single AccuDrawer Gen4.\*\*
- PervasID 9200 RFID reader can often detect tags even if the RFID tag size and type aren't properly matched to each tool.
- Tags perform differently when mounted on different parts of a tool. PervasID gives some flexibility in choosing a mounting location, since testing on an AccuDrawer Gen4 with 600 tools has shown that it will read tags with RSSI values  $\leq -65\text{dBm}$ \*\*
- Tool layouts are carefully designed to account for issues like spacing, distance from drawer edges, shadowing effects from tools above/below, and the impact of large metal tools on smaller neighbors. Because PervasID can read exceptionally weak tags, tool layouts can be more quickly designed because they don't have to be so finely optimized.
- Tools are often placed back in cabinets upside down or flipped 180 degrees, often changing the performance of the tag. PervasID can see tags that suddenly are very weak because of changes to their orientation, meaning we don't have to over-design the tool layout to accommodate this issue.
- Any time a tool is added or removed, the entire radio environment inside the cabinet changes. This can cause tags to suddenly stop reading because they become shadowed or inadvertently in a blind spot.

**600**  
TOOLS PER  
ACCUDRAWER  
GEN 4



## Installation

AccuDrawer reader upgrades performed at CribMaster and customer sites have taken less than four hours, meaning you can be back on-line within a shift. Contact your CribMaster representative to coordinate our certified technician's on-site visit to perform the upgrades.



## Machine & Tag Health Check

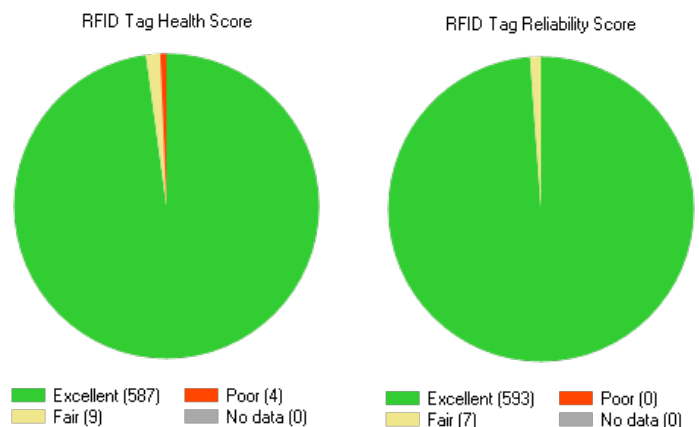
A customer will be provided with a report card for each upgraded machine that identifies RFID tags that need to be replaced vs. tags that need attention to things like tag type used, mounting location, mounting method, tag orientation or position within the cabinet offering further improvements to performance.

## RFID Reader Firmware

The innovative Autoinventory feature in the **New Reader** automatically scans the unit, processing the data to set the best options for power, sensitivity, scan times, and overall performance.



## Crib 8500 RFID Tag Health and Audit



Item Name	Description
Type of RFID-enabled solution	Choose an item.
Number of RFID-tagged tools assigned	600 as of Feb 2 2023
Physical location	TODO: Enter site address
Type of tools	TODO: Enter tool usage
Type of RFID reader	TODO: Enter type of RFID reader