

RFID for Efficient Cannabis Industry Tracking from Seed to Sale for Plants, Products and Packaging

OVERVIEW



Problem

**Lacking Knowledge of
RFID Benefits, Cannabis
Companies Opt Out**



Background

**Limited Use of RFID
Technology Limits
Capabilities**



Solution

**Leverage Full RFID Benefits
for Tracking Plus Real-Time
Business Intelligence**



The cannabis industry is a highly regulated market that deals in high-value items that include cannabis plants, by-products, finished products, and shipping units. To efficiently track each item requires a solution that meets the unique challenges and compliance requirements in the cannabis industry. RFID tracking offers a unique tagging technology that can provide many benefits for the cannabis marketplace. Let's explore the challenges of the industry and how RFID can help.



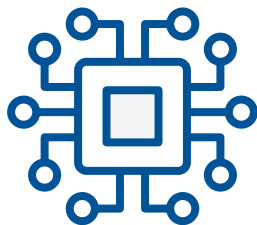
PROBLEM

Lacking Knowledge of RFID Benefits, Cannabis Companies Opt Out

In the United States, state regulatory systems are informally categorized as "metrc" which stands for marijuana, enforcement, tracking, reporting and compliance, or "non-metrc." Metrc is one of three major regulatory software

frameworks which states leverage to ensure compliance by the growers and other operators handling cannabis products. Think of metrc as the DMV of cannabis for states utilizing metrc.

In metrc states, growers, processors, and dispensaries (retailers) must all tie into the state's metrc system which enables real-time auditing by the authorities. Operators in non-metrc states face similar regulatory requirements, but with a key difference: metrc states require and supply RFID tags pre-encoded and pre-printed for use with plants and packages, whereas the other regulatory software frameworks do not. Growers, processors, and dispensaries in non-metrc states can select their own tracking technology. Many opt for traditional barcode systems — and some still use paper-based manual systems — due to a lack of understanding of the benefits RFID can bring to the industry.



BACKGROUND

Limited Use of RFID Technology Limits Capabilities

While metric state operators must use the designated metric RFID tags, most growers, processors and dispensaries do not take full advantage of the technology. They utilize the RFID (or even the fallback barcodes) only in connection with the state's reporting requirements. With a more advanced implementation of RFID, however, the metric tags can be leveraged to tie into the company's ERP system to provide real-time business intelligence beyond regulatory compliance.

For an operator in a non-metric state looking to implement RFID, the ideal solution involves on-site, on-demand generation of RFID tags and labels encoded with real-time data.

SOLUTION

Leverage Full RFID Benefits for Tracking Plus Real-Time Business Intelligence

For an operator in a non-metric state looking to implement RFID, the ideal solution involves on-site, on-demand generation of RFID tags and labels encoded with real-time data. Typically, a solution provider like our partner [Outlaw Technology](#) provides custom RFID plant tags and Printronix Auto ID RFID-enabled printers. These printers can receive real-time data from the operator's ERP system, including regulatory data, then print and encode RFID tags even in harsh environments. The [Printronix Auto ID T6000e](#) wide-format printer is an ideal choice to print with Outlaw's custom Arrow plant tags developed in collaboration with [Tadbik](#), which are 6 inches in length. The T6000e has robust media tolerances and can handle printing on the thicker materials of plant stakes, hangtags, and pot labels.



The types of applications listed below can all be integrated with a company's daily business platform through a proper RFID solution.

- Plant maturity/lifecycle management
- Unique weight capture at harvest and during processing
- General plant and package inventory
- Real-time location
- Item movement
- Item destruction
- Parent-child relationships as plants are transformed from one product to another
- Order fulfillment
- Shipping and receiving

Solution providers, such as Outlaw Technology, provide the technical expertise, regulatory knowledge, software, and hardware designed to leverage existing metric RFID tags or employ new RFID tags in non-metric states for a fully integrated, end-to-end solution. These solutions dramatically increase an operator's efficiency and their ability to comply with regulations in a one-two punch.

RECOMMENDATION

The Printronix Auto ID T6000e Enterprise RFID Printer

The benefits of RFID are wide ranging. Using an integrated RFID solution, operators can seamlessly manage any of these applications in real-time:

- A grower looking to inventory thousands of plants across hundreds of acres.
- A grower trying to track down a particular plant among thousands.
- A processor seeking to track parent-child relationships as a raw plant is transformed into different end products.

Another key benefit of RFID for the cannabis industry is the dramatic reduction in human errors. Counting thousands of plants is a daunting task, but with an automated RFID system, this operation can be performed with up to 99.9% accuracy — and in minutes as opposed to hours or days.

Finally, RFID solutions allow workers to focus on other tasks instead of costly, error-prone jobs like counting plants or updating spreadsheets.

The [Printronix Auto ID T6000e enterprise industrial printer](#) is designed to print and encode RFID standard labels, plant tags and even on-metal tags and offers a robust, in-house printing solution to leverage the benefits of RFID technology.



CONCLUSION

In-House RFID Printers to Enhance Cannabis Product Tracking and Operations

Our Printronix Auto ID RFID-enabled printers can handle a wide range of tags and labels with high volume to enhance cannabis industry efficiency and product tracking from seed to sale.

To learn more about this solution, please contact your local sales representative.