



**Every asset a unique  
digital identity**

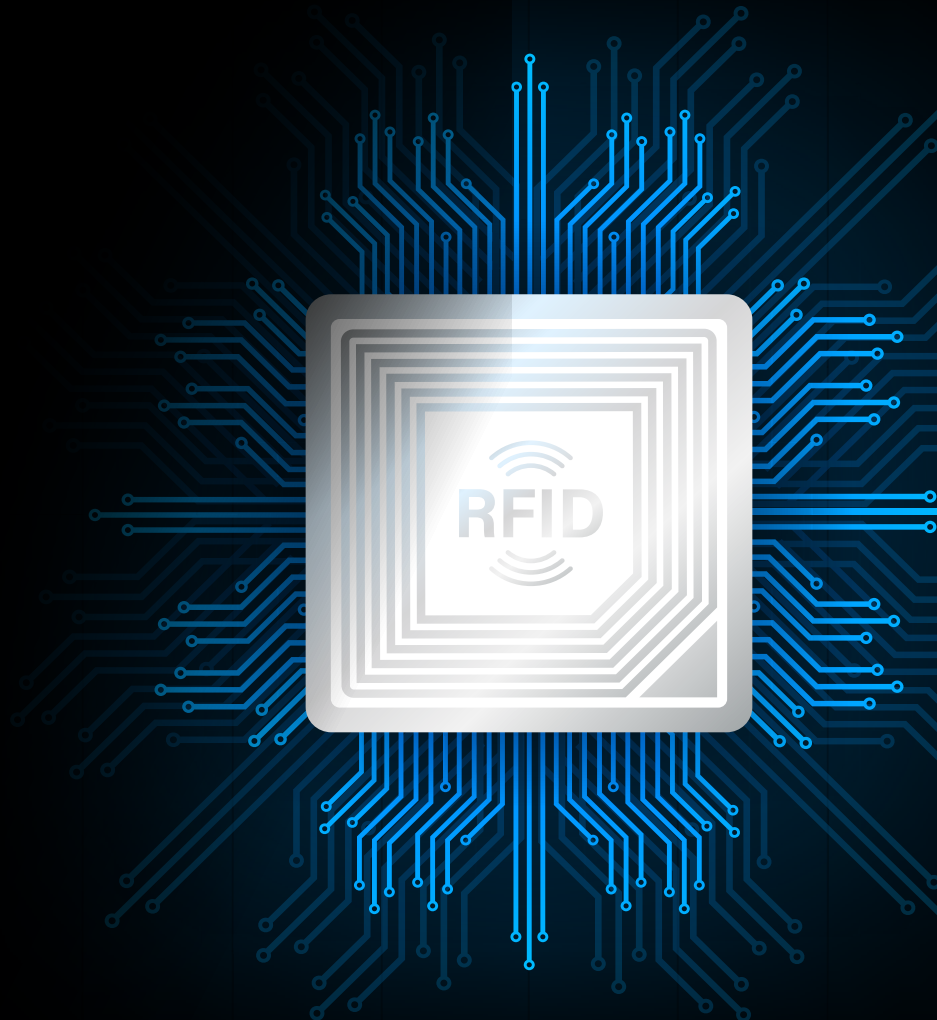
**RFID solutions guide book**

# Why this Guide?

With RFID, assets can be given unique digital identities that enable you to identify and locate them all at once, from a distance, in real time, without needing line of sight.

As a manufacturer, we can realise the technology's full potential in any unique workplace by fully customising our RFID solution and by making it work for you, in your working environment.

**Brady offers a complete, fully customisable RFID solution that can generate considerable efficiency gains, both on operational and decision-making levels.**



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# Operational benefits

RFID has the potential to considerably increase workplace efficiency and productivity.

- Locate, identify, track and trace multiple assets at once, without needing line of sight
- Avoid errors by quickly guiding employees to every asset they need
- Save time by automating inventory audits to just a couple of clicks
- Gain efficiency by checking outgoing cargo completeness in seconds



# Strategic benefits

Gain additional insights with automatically captured data, and bring your business to your fingertips.

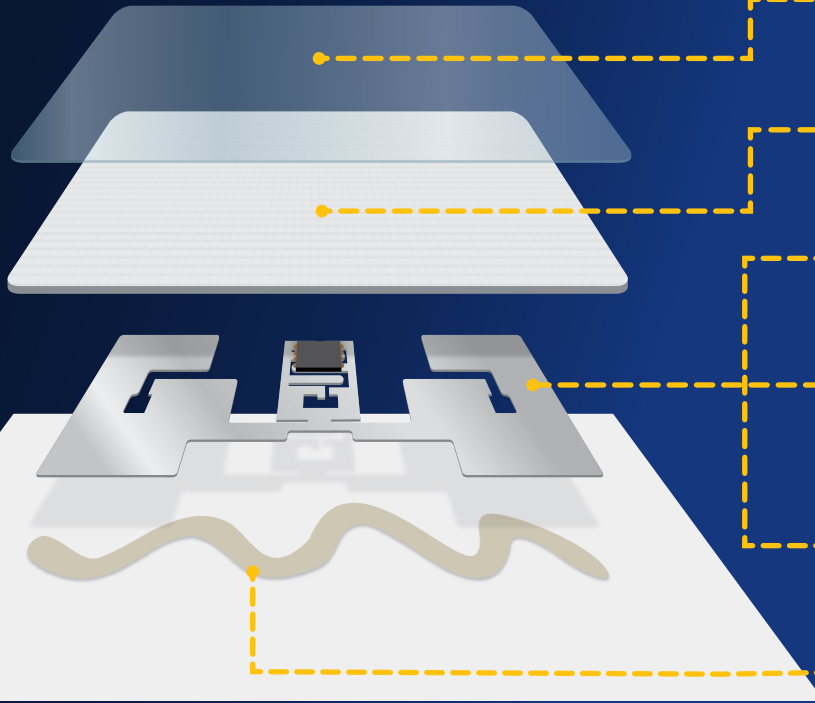
- Inform strategic decision making on asset numbers, their locations, preventive maintenance and environmental elements
- Employ recent and accurate data to further drive the profitability of your business

# Norms & standards

Our complete RFID solution complies with the following RFID and NFC standards:

- ISO/IEC 18000-63 (EPC Gen2v2): provides a common technical specification for UHF RFID scanners and labels/tags.
- ISO/IEC 14443 A/B: describes 2 close-reading protocols with difference in modulation, coding schemes and anti-collision methods
- ISO/IEC 15693: long distance reading protocol and a popular high frequency RFID standard
- NDEF Format: is a standardised data format that enables NFC chip writing and reading with smartphones

# What is an RFID label?



**Topcoat:** printed to present your logo, text, serial number, barcode, QR-code or any print

**Substrate:** selected and customised to resist specific industrial conditions

**RFID chips:** selected and customised to offer a memory size that fits your application

**RFID antennae:** selected and customised to provide optimal read ranges and flat or curved surface compatibility

**Sensors:** optionally added to create asset temperature, moisture or other data

**Adhesive:** selected and customised to stay attached to your application, in your workplace

# Complete and customisable solution

To help realise the full potential of any unique workplace, we can tailor our RFID solution to make it work for you, in your working environment. Our complete solution includes:

- Fully customisable RFID labels that stay attached to your assets
- RFID readers with custom developed apps and integration in existing ICT infrastructure
- RFID printers to create additional labels at your premises





The background features a repeating pattern of black RFID symbols (a central dot with three concentric arcs) on a light brown, textured surface. A grid of dark brown lines is overlaid on this pattern. In the lower right quadrant, a 3D cube is rendered in a dark brown color, appearing to sit on the grid.

## Track & Trace RFID Labels

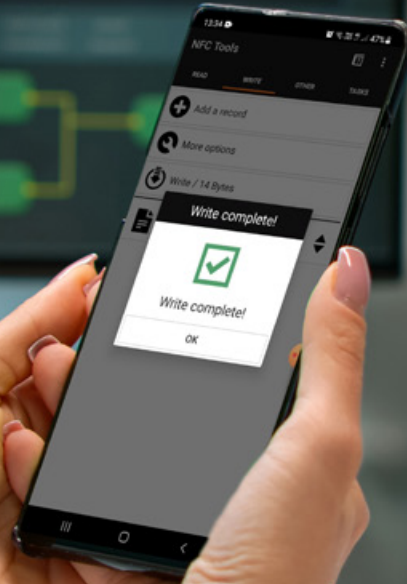
Track assets and manage inventories more efficiently in complex industrial environments with RFID labels that can fit any surface.

Give every asset a unique digital identity your readers can radio in on, so you'll know where your assets are, without needing line of sight.

# NFC Labels

Easily read and write data to NFC labels that can be applied to every asset with modern, NFC-enabled smartphones.

Our reliable NFC labels are the goto solution for flexible data reading and writing in close (5cm) proximity.



# Dual Frequency RFID Labels

Improve any product or item's supply chain management, authentication and end-user engagement with a single label that can be read both by RFID readers and smartphones.

Involve your customers to provide feedback on uniquely identifiable products, just by reading the label with your app installed on their (NFC-enabled) smartphone.



# Temperature Sensing RFID & NFC Labels

Easily check temperatures from a distance or up close, for one or multiple assets, with battery-free Temperature Sensing RFID or NFC Labels.

Potential applications include environmental monitoring, material and equipment monitoring, cold chain monitoring, data centre monitoring, maintenance and safety data collection, and greenhouse monitoring.

Label chip ID:  
c6a8008e04206947

Current temperature

**7.0° C**

Temperature logging

7/8/2020, 3:35:26 PM: 11.9° C



# Moisture Sensing RFID Labels

Easily get multiple asset moisture readings from a distance with battery-free Moisture Sensing RFID Labels.


UHF RFID Readers will pick up a wet or dry condition from all labels within range, each including a unique identifier.







**BENEFITS**



## **Custom reader apps & integration**

See RFID data in just the way you need them with custom developed reader apps or software. Harness the technology's full power with RFID data that are easy to collect, that fully fit your processes, and that unlock the next level of efficiency for your business.

## Print & program

Quickly create additional RFID labels. Easily serialise, program and print standard and custom label designs with practical RFID print & program systems at your premises.



# 8 practical applications

What could RFID mean for your business? How to optimally leverage its power? Which efficiency gains does this technology have in store?

Fuel your imagination and tune in on how other businesses benefit from giving every asset a unique digital identity.



# Efficient picking

Warehouses and logistics companies can considerably increase forklift picking efficiency with RFID labels.

Forklifts can be located quickly with RFID, and location detection can take place in real time and continuously, or at crucial places such as zone changes, or when items are scanned, picked up and dropped off. The data generated enable pick-up and drop-off location control, efficient route calculation and route registration.



Scan or click

# Instant cargo checks

A distribution centre automated cargo checks with RFID labels and readers.

RFID readers can check every component package against the cargo lists in central ERP-systems. Wrong components are easily filtered out, and the system will also indicate any missing pieces as well as confirm a complete shipment.



# Customer interaction

Rental equipment companies can automate asset finding in their warehouses and enable customers to quickly & accurately identify assets for pick-up with dual frequency RFID labels.

When a customer orders an item, that item is located in the warehouse in real time by fixed UHF RFID readers. Pickers can easily home in on the ordered equipment using their portable reader.

In addition customers can easily, and very accurately, signal pick-ups for specific rented items by reading their dual frequency label with their smartphone.



Scan or click

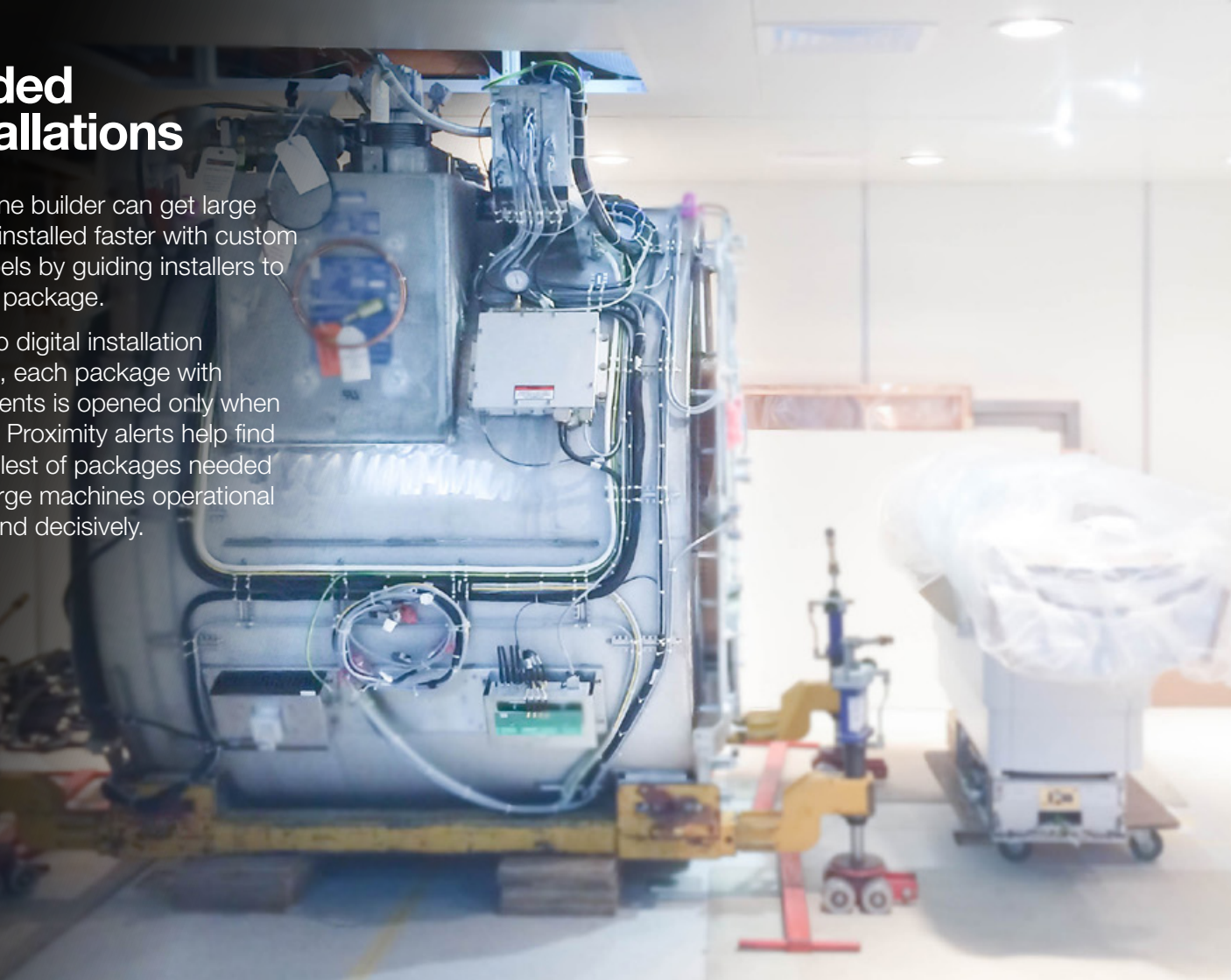
# Guided installations

A machine builder can get large devices installed faster with custom RFID labels by guiding installers to the next package.

Linked to digital installation manuals, each package with components is opened only when relevant. Proximity alerts help find the smallest of packages needed to get large machines operational swiftly, and decisively.



Scan or click



# Preventive maintenance

Rail passenger and freight transporters can increase locomotive and wagon uptime by easily identifying train composition with RFID labels and readers.

Each wagon or locomotive can be linked to an Asset Management software via an RFID label. Intervention data can be added to the maintenance history of labelled wagons in the field, and similar wagons can be flagged for efficient preventive maintenance.



Scan or click



# Automated inventory audits

A worldwide ICT-company tracks and manages the location of every client's servers and other high value IT assets automatically, and can report on their location at the click of a button.

Custom, passive RFID labels on every asset, combined with fixed readers at all datacenter exits provide accurate, real-time tracking. Print-and-program printers in a central location enable the company to label any new assets immediately with reliable, custom RFID labels to maintain a complete overview.



# Secured identification

A full service ICT infrastructure provider secured cable identification data on double layered, encrypted NFC cable labels.

On-metal NFC labels can be pre-programmed to include an information top layer for in-house and external professionals, and a deep security data layer accessible for in-house administrators. Professionals who are performing maintenance interventions can be given access to relevant data, on relevant labels with RFID pens linked to their user set-up.



Scan or click



# Faster safety checks

A large airline carrier, flying to 130 destinations, uses RFID labels and readers to perform routine aircraft checks 10 times faster.

Aircraft maintenance crews scan the cabin against an inventory list to check data on life vests, oxygen generators and masks. Not needing line of sight on every item creates a huge difference in operational speed, with effects on the availability of personnel and aircraft.



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