



Every asset a unique digital identity

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Complete RFID Solutions book

# About BRADY



Once you have worked with BRADY, our name will stick with you, (just like our labels) because BRADY is one of the world's leading labelling and identification specialists.

## Innovative

At BRADY we continue to improve. We have many customers from all industries, and we strive to be ahead of their needs by continuing to invest in research for even more performant solutions. By developing more user-friendly and efficient concepts, we give our thousands of customers the best in the market.

## Strength

At BRADY, we believe our biggest strength is the wide range of identification and safety solutions we can offer our customers, whether it's labelling the smallest component or complete signage for an entire warehouse. We're also proud to offer many products and services - from printers, scanners and software to service contracts and on-site training - that compliment any identification job. And don't forget, our wide network of expert distributors can always offer you a tailor-made solution to meet your specific requirements.

## Trust

For over a hundred years, BRADY has been connected with quality, trust and stability. We demand the best for your products and services, because we know, better than anyone, the importance of good and reliable identification. Identification looks like a small detail, but every professional knows that this kind of detail is crucial to any business.

## Inform

We also have specialised dealers in your region, who can answer all your identification, safety and labelling questions, specific to your activity. They will be happy to provide you with all kinds of options and solutions with no obligation.

**Microsoft is a trademark of Microsoft Corporation, Bluetooth is a trademark of Bluetooth Sig, Inc., Android is a trademark of Google Inc.**



Brady products are sold on the condition that the purchaser will test them in actual use and determine for himself/herself their suitability to his/her intended purpose. Brady warrants to the purchaser that Brady products are free from defects in material and workmanship but limits its obligation under this warranty to the replacement of the product which has been shown to Brady's satisfaction to have been defective at the time of its purchase.

The warranty does not extend to any persons who have acquired the product from the purchaser. It is in lieu of any other warranty, including every warranty of sale-ability, marketability or suitability for the intended purpose, and is also in lieu of any other obligation or liability on the part of Brady.

Under no circumstances will Brady be liable for losses, damage, costs or subsequent damage of whatever nature which may arise in connection with the use of, or inability to use, Brady's products.



# A safer and more productive working environment

## The Brady Advantage

When it comes to identification, safety and compliance, there's a clear advantage to working with Brady. We put our customers first in everything we do. Our goal is to give you an unrivalled customer experience. We are relentlessly committed to performance and excellence - in our products, services and people. Our products and solutions perform in ways that others simply can't match. Our people perform in ways that regularly exceed your expectations. And our focus and discipline work toward solid, long-term performance for our customers. In short, Brady is the company you trust when performance matters most.

[Learn more about the Brady Advantage at: www.bradyeurope.com](http://www.bradyeurope.com)



# A digital identity for every asset

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.



## 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



## 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



## 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

# Search less. Find more.

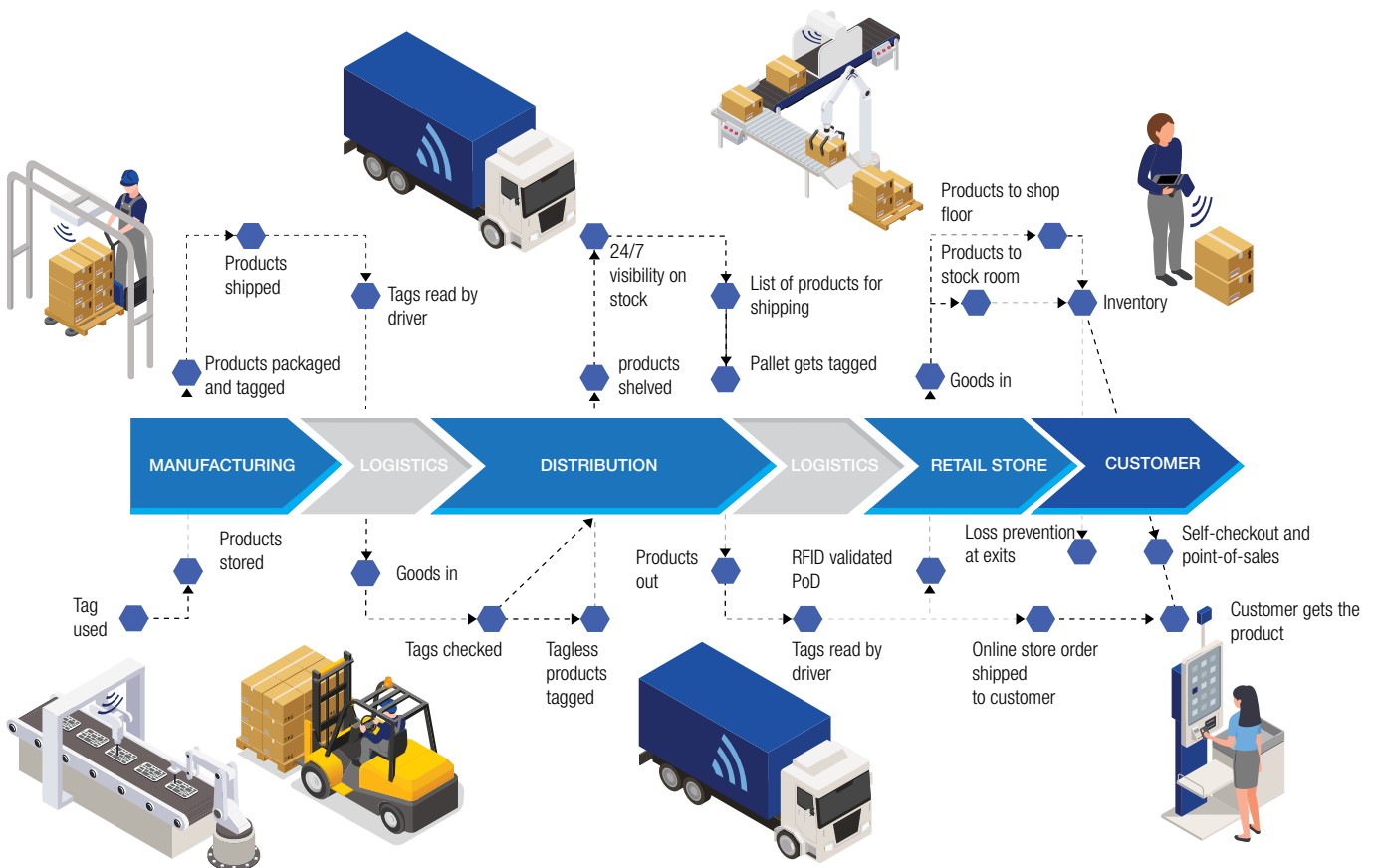
RFID technology enables visibility on assets, items, products, components and parts without needing line of sight.

Data in central locations can be automatically updated to follow items throughout production, in various stages of processing, in storage, and when they are picked, assembled or shipped to customers. All by placing fixed RFID readers at strategic locations. As a result, the journey or current location of any specific item or asset can be found in a couple of clicks

With portable RFID readers, labelled items can be seen from a distance, selected on screen, and found in seconds with home-in sounds and visuals.

Applications include:

- automated asset and item tracking
- compliance tracking in production
- guided part lifecycle management
- automated inventories
- automated stock management
- automated shipment accuracy checks
- guided machine part installations
- fast item finding



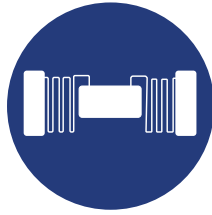


# One supplier. All solution components.



## Industrial RFID readers

- Nordic ID & Brady manufactured
- Handheld, fixed Readers and tags



## Reliable RFID labels

- UHF, NFC & Dual Frequency
- RFID sensing labels (temperature, moisture, etc)
- RFID LED Labels
- On & Off Metal



## Flexible RFID software

- Nordic ID developed RFID software (RADEA.IO)
- Standard or customized



## Expert RFID services

- Support & repair from the Brady/ Nordic ID team
- Installation and maintenance via Partners

## Brady provides all components for a complete RFID solution.

- ▶ **Industrial RFID readers:** choose between fixed and portable RFID readers to reach your goals, or combine them in the ultimate automated visibility solution. We supply standalone readers, can turn any smartphone and tablet into an RFID device, and even offer wearable RFID readers.
- ▶ **Reliable RFID labels:** when it really needs to stick and stay attached, Brady's engineered labels get the job done. Our labels have been tested in the world's most challenging industries, and can all be equipped with battery-free RFID antennas, chips and sensors.
- ▶ **Flexible RFID software:** our off-the-shelf RADEA.IO RFID software platform is designed for flexibility, set-up speed and integration with existing ICT infrastructure. Our software engineers can also design applications from scratch, and integrate them in existing tools.
- ▶ **Expert RFID services:** if you want guidance to automate item tracking, our RFID engineers can analyse your needs and challenges to present a proof of concept at your premises. In addition, we can install and maintain your readers to provide you with full visibility on your items and assets, today and in the future. To optimally fit your business applications, we carefully select the right components from our offer.

Alternatively, as a manufacturer, we have the capabilities to modify each component to your specifications.

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

## HH83 and HH85 RFID ACD

The HH83 scanners are an excellent RFID scanning choice and are a perfect match for Brady SmartID solutions. The Brady HH83 models are perfect for daily RFID scanning. They enable users to pick up a large range of RFID signals and offer a great user experience. The HH85 model is a ruggedised scanner version with a pistol grip.

### Product highlights

- Protect your investment thanks to our easily upgradeable modular design: transform the barcode to RFID whenever you are ready
- Market leading state-of-the-art UHF RFID performance
- Ergonomic design focused on comfortable use
- Operates a full working day on a single charge
- Android operating system for easy application development
- Fully integrated into Nordic ID solutions



HH83 RFID ACD

HH83

Article No.	Order Ref.	Description
310378	B-HH83-2D	Brady HH83 Reader 2D Imager
310379	B-HH83-2D-LTE	Brady HH83 Reader 2D Imager/LTE
310380	B-HH83-UHF-EU	Brady HH83 Reader UHF ACD 2Dimg EU
310381	B-HH83-UHF-LTE-EU	Brady HH83 Reader UHF ACD LTE 2Dimg EU

## HH85 RFID ACD

The Brady HH85 RFID ACD is the fully ruggedised sibling of the Brady HH83 RFID ACD. They share the same specs as the HH83 for memory and CPU and in addition come with rubber bumpers and a pistol grip, making them very solid and drop proof scanner.

### Product highlights

- Market leading state-of-the-art UHF RFID performance
- Protect your investment thanks to its superior robustness
- Unique combination of large display and ergonomic pistol grip
- Ergonomic design focused on comfortable use
- Operates 18 hours on a single charge
- Android operating system for easy application development
- Fully integrated to Nordic ID solutions



Article No.	Order Ref.	Description
310383	B-HH85-UHF-EU	Brady HH85 Reader UHF ACD 2Dimg EU
310384	B-HH85-UHF-LTE-EU	Brady HH85 Reader UHF ACD LTE 2Dimg EU

## EXA81

With Brady EXA81, retail and logistics markets receive a powerful UHF RFID reader that is compatible with all common operating systems. Use your own smartphone in combination with the EXA81 to enable RFID reading with highest speed and reading range in the market.

### Product highlights

- Best mobile RFID reading capabilities
- No battery swaps: works 24 hours on a single charge
- Read UHF RFID labels from up to 15 metres, and easily scan barcodes and 2D codes
- Compatible with a wide range of smart devices that can be linked wirelessly via Bluetooth 5.3 or with USB-C cable
- Mount to any smart device using screws or Quadlock
- Scan quickly: ergonomic pistol grip with trigger enables fast and easy scanning all day long

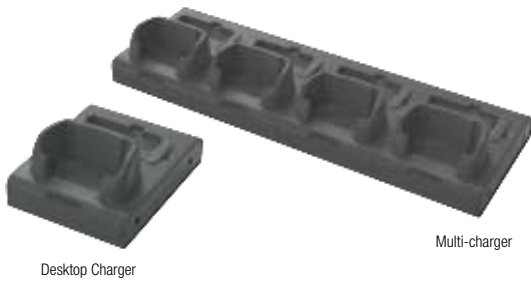


Article No.	Order Ref.	Description
321710	B-EXA81-EU	Brady EXA81 RFID Reader EU

### Accessories

Article No.	Order Ref.	Description
320057	B-HH85-Batt-Pistol	Brady HH85 Battery 10050mAh Pistol grip cover

## HH83/HH85/EXA81 RFID chargers



Article No.	Order Ref.	Description
309995	HH83-85-DTC-KIT-EU	HH83 - HH85 Desktop Charger Kit
310986	ADPT-QC3-USB-KIT	Adapter QuickCharge3 USB-C kit EU/UK/US
311032	HH83-4U-DTC-KIT-EU	HH83 4-Bay Desktop Charger 4 Batt slots EU



### EXA31

The compact and lightweight wearable UHF RFID reader that is easily connected to any Smart Device via Bluetooth low energy. Its compact ergonomic design make in motion data collection tasks easier and more comfortable.

Article No.	Order Ref.	Description
321899	QL-Adapt-EXA31-81	Quad lock Universal Adaptor for EXA31 and EXA81

### Product highlights

- Compact and lightweight UHF RFID reader
- Easily connect any Smart Device to the UHF RFID reader via Bluetooth low energy
- Optimal read range for your use case
- Can be fastened so that both hands remain free for work tasks
- Long operating time with single charge
- Nordic ID Smart Pair for effortless connectivity

### Accessories

Article No.	Order Ref.	Description
310993	EXA31-868-UHF-EU	EXA31 868 UHF 2D imager EU



### EXA21

The Nordic ID EXA21 is the world's smallest RFID reader with automatic reading, simply connect the Nordic ID EXA21 to a Smart Device or to Windows 10 PC via Bluetooth low energy. Its lightweight, compact, and ergonomic design makes it the ideal portable RFID reader for easy and comfortable on-the-go data reading.

Article No.	Order Ref.	Description
310975	EXA21-868-UHF-EU	EXA21 868 UHF BLE USB EU

### Accessories

Article No.	Order Ref.	Description
310986	ADPT-QC3-USB-KIT	Adapter QuickCharge3 USB-C kit EU/UK/US
310987	EXA21-STRAP-S	EXA21 Wrist Strap S-size
310988	EXA21-STRAP-L	EXA21 Wrist Strap L-size
310989	EXA21-DTC-KIT-EU	EXA21 4-Bay Desktop Charger Kit EU
310992	EXA21-FLEX	EXA21 Flex Holder

### Product highlights

- Thin and lightweight UHF portable RFID reader
- Connect to any smart device effortlessly using Nordic ID Smart Pair
- Smart automatic reading capabilities for effortless operation
- Enabling distributed mobile PoS applications
- Make check-out queues a thing of the past by enabling mobile payments



## IRX200 RFID Reader

### High-end RFID performance and edge computing in an industrial shape

The IRX200 features the same RFID engine as the high-performance FR22 reader, and provides a very high asset track and trace performance, even in challenging environments.

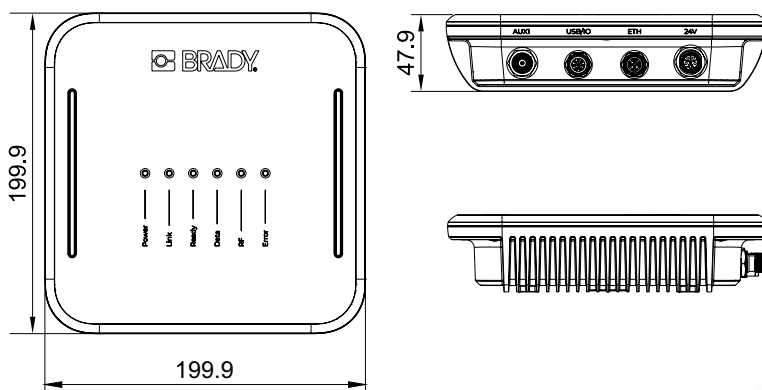
The IRX200 has one integrated antenna, and one connector that allows to connect one more additional antenna, such as the XA20 antenna, that has the same RF behaviour and form factor than the IRX200, for an exact match when designing an RFID reading point. The IRX200 includes the newest Brady smart computing platform, with real-time capabilities to support industrial protocols such as Profinet, OPC UA and Ethernet IP. It also allows applications and data to be embedded inside the IRX200 reader itself, in case that it's used in non-industrial networks.



Article No.	Order Ref.	Description
321713	B-IRX200-EU	Brady IRX200 RFID Fixed Reader EU

### Product highlights

- High RFID performance and powerful processing platform
- Industrial protocols to connect with most of the automation systems
- Rugged housing with integrated RFID antenna and robust connectors



### Accessories

Article No.	Order Ref.	Description
321897	B-XA20-ANT-EU	Brady XA20 UHF RFID Antenna EU
321900	M12-X-RJ45-5M	IRX200 5m cable M12-X to RJ45
321901	M12-X-RJ45-10M	IRX200 10m cable M12-X to RJ45
321902	M12-X-RJ45-20M	IRX200 20m cable M12-X to RJ45
321903	RP-TNC-ANT-1M	RP-TNC Antenna 1m cable
321904	RP-TNC-ANT-3M	RP-TNC Antenna 3m cable
321905	RP-TNC-ANT-5M	RP-TNC Antenna 5m cable
321906	RP-TNC-ANT-10M	RP-TNC Antenna 10m cable
321907	IRX200-PSU-CORD-EU	IRX200 Power cord EU
321912	M12-A-USB-IO	IRX200 USB/IO cable 150 cm
321913	M12-A-IO	IRX200 IO cable 150 cm
321914	M12-L-POWER	IRX200 Power cable 150cm M12-L connector



## FR22 RFID Fixed Reader



The Brady FR22 is the core device of a new approach for RFID fixed systems with wide communication options and a modular design. The FR22 is a critical building block for various track & trace and intelligent manufacturing solutions.

It enables different use cases for different segments depending on which modules are attached to it.

Using the same API for backward compatibility with all the other Brady devices and with an improved connectivity, the Brady FR22 is the evolution towards a smarter platform, more powerful, scalable, flexible, and manageable than ever.

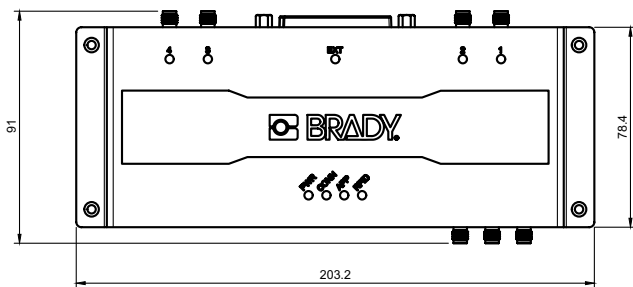
Article No.	Order Ref.	Description
311937	B-FR22-RFID-RDR-EU	Brady FR22 Fixed RFID Reader EU
311939	B-FR22-RDR-LTE-EU	Brady FR22 Fixed RFID Reader LTE EU

### Product highlights

- Fast and reliable edge computing with support for custom embedded applications
- Wide communication options that enable flexibility in system designing and no need for external connectivity hardware
- New UHF RFID engine based on the very latest technology
- Develop embedded web apps with user interface. Eliminating the need for external PC/tablet
- Brady extension connector for plug and play accessories like Brady MUX16
- Connect external devices, sensors, triggers, lights and buzzers
- Full set of API's available for controlling the reader

### Accessories

Article No.	Order Ref.	Description
311920	FR22-PSU-cord-EU	Power Supply FR22 EU
311927	FR22-ANT-Cable-1m	FR22 antenna cable 1 m SMA-male - RP-SMA
311928	FR22-ANT-Cable-3m	FR22 antenna cable 3 m SMA-male - RP-SMA
311929	FR22-ANT-Cable-5m	FR22 antenna cable 5 m SMA-male - RP-SMA
311930	FR22-ANT-Cable-10m	FR22 antenna cable 10 m SMA-male - RP-SMA
311931	FR22-ANT-GA30-8cm	Antenna cable FR22 mounted on GA30 8cm
311941	B-GA30-ANT	Brady GA30 antenna
313687	B-GA30-Backcivr-kit	Brady GA30 back cover kit



## FR22 LITE RFID Fixed Reader

### Affordable edge computing capabilities

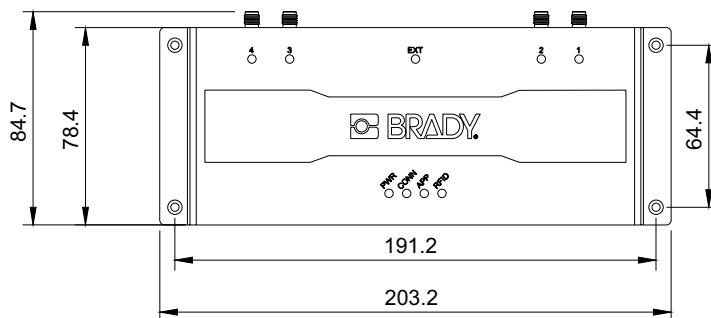
The FR22 Lite is the entry variant of the powerful FR22 reader, but that does not mean its RFID performance is less powerful. Indeed, the FR22 Lite features the same RFID engine as the FR22 and provides a very high asset track and trace performance, even in challenging environments. Using the same API for backward compatibility with all the other Brady devices and with an improved connectivity, the Brady FR22 LITE is the evolution towards a smarter platform, more powerful, and manageable than ever.



Article No.	Order Ref.	Description
319470	B-FR22LITE-RDR-EU	FR22 Lite Reader

### Product highlights

- Fast and reliable edge computing with support for custom embedded applications
- New UHF RFID engine based on the very latest technology
- Develop embedded web apps with user interface. Eliminating the need for external PC/tablet
- Connect external devices, sensors, triggers, lights and buzzers
- Full set of API's available for controlling the reader



### Accessories

Article No.	Order Ref.	Description
311920	FR22-PSU-cord-EU	Power Supply FR22 EU
311927	FR22-ANT-Cable-1m	FR22 antenna cable 1 m SMA-male - RP-SMA
311928	FR22-ANT-Cable-3m	FR22 antenna cable 3 m SMA-male - RP-SMA
311929	FR22-ANT-Cable-5m	FR22 antenna cable 5 m SMA-male - RP-SMA
311930	FR22-ANT-Cable-10m	FR22 antenna cable 10 m SMA-male - RP-SMA
311931	FR22-ANT-GA30-8cm	Antenna cable FR22 mounted on GA30 8cm
311941	B-GA30-ANT	Brady GA30 antenna
313687	B-GA30-Backcvr-kit	Brady GA30 back cover kit



Article No.	Order Ref.	Description
311920	FR22-PSU-cord-EU	Power Supply FR22 EU
311923	GPS-Antenna	Active GPS antenna



## FR22 VS FR22 LITE RFID comparison

The FR22 Lite has the same RFID performance and internal computer as the FR22, but without wireless communication, video support or Extension Port (for BFA antenna and multiplexer).

	FR22	FR22 LITE
Connectivity Options	GPIO Industrial mini IO port, USB-C, Wireless 802.11 b/g, USB Host, Ethernet, Bluetooth, Wireless 802.11 a/b/g/n, GSM/EDGE, LTE-FDD B1/B3/B5/B7/B8/B20, LTE-TDD B38/ B40/ B41, WCDMA B1/B5/B8	GPIO Industrial mini IO port, USB-C, USB Host, Ethernet
Connector	Brady extension port	-
HDMI	Video 1280 x 720 and 640 x 480 resolution	-
Global Navigation	GPS, BeiDou, Glonass	-
Sim	Mini-sim	-
RF Radiated Power	+32dBm (+30dBm in FCC region)	+32dBm (+30dBm in FCC region)
Central Processing Unit (CPU)	Quad-core A7 1.1GHz	Quad-core A7 1.1GHz
Maximum Receive Sensitivity	-87dBm	-87dBm
Reading Speed	Up to 1000 tags per second	Up to 1000 tags per second
Operating System	Linux	Linux

## IO Connection Box for the Brady FR22 reader and Sampo S3

The IO Connection Box offers a robust and flexible connection of external devices (e.g. lights, buzzers) and triggering sources (e.g. sensors, buttons) to the FR22, FR22 Lite and Sampo S3 RFID readers. It is connected to the mini IO port of the RFID reader via a provided cable, providing easy access to the pins of the IO port and adding two relays.



### Product highlights

- Easy access to the IO pins on the FR22, FR22 Lite and Sampo S3
- LED indicators
- 2 opto-isolated inputs
- 2 opto-isolated outputs or 2 relay outputs (configurable with a switch)

Article No.	Order Ref.	Description
320034	B-IO-EXT-BOX	Brady IO Connection box

## Brady MUX16

Brady MUX16 extends the RFID reading zones of the BRADY FR22, from 4 to 16. BRADY MUX16 is fully integrable with BRADY FR22 working as one piece without any additional cables.

### Product highlights

- Very low losses providing better overall efficiency.
- Unique power + data interface over coax.
- Fully integrable with BRADY FR22.
- Ready to use with NUR API.



Article No.	Order Ref.	Description
311940	B-FR22-Multiplex	Brady Mux 16 port multiplexer
311947	B-FR22-Mux16-EU	Brady FR22 + Mux 16 ports kit EU
311949	B-FR22LTE-Mux16-EU	Brady FR22 LTE + Mux 16 ports kit EU

## SAMPO S1

The Brady Sampo S1 is a fixed UHF RFID reader with an integrated antenna, which come with a flat design. Brady Sampo S1 is a basic but powerful RFID reader and writer with USB interface for communication and power

### Product highlights

- Integrated antenna
- High performance UHF RFID
- Three external antenna ports
- Power over USB or external power supply



Article No.	Order Ref.	Description
310215	SAMPOS1-RDR	Sampo S1 Reader / UHF RFID (USB), EU

## SAMPO S3

Reliability, ease-of-use, and speed. These are the breed qualities of the legendary, all-purpose Finnhorse. The Brady Sampo S3 delivers these very same promises. Get access to an RFID reader, antenna, and computer in one package. Just one Brady Sampo S3 RFID reader at your point-of-sale has you covered – there's no need for any other external hardware.



### Product highlights

- All-in-one RFID solution. With an integrated antenna and edge computing, you won't need external hardware
- Time-proven performance. The Sampo line has delivered over eight years of uncompromising performance
- Lightweight, sleek design. The device's unobtrusive design lets you easily mount the device in nearly any position
- Easy installation. Integrated mounted brackets and Power-over-Ethernet make setup simple

Article No.	Order Ref.	Description
316357	SAMPO-S3-RDR-EU	Sampo S3 Reader UHF RFID EU

## Sampo S1 VS Sampo S3 comparison

	Sampo S1	Sampo S3
Use cases	Apparel and retail (PoS)	Apparel, retail, gate and tunnel solutions
Power	Via USB (no power supply required)	Power over Ethernet (PoE)
Wired connectivity	USB	USB, Ethernet, IO
Wireless connectivity	None	WLAN, Bluetooth
Computing capabilities	None	Edge computing platform with Linux OS
Reading range	Medium	Large

## STIX



Brady Stix is an affordable credit card sized UHF RFID reader with USB connectivity. It makes it easy to bring UHF RFID capabilities to your PC, smartphone or tablet. The Brady Stix is suitable in application areas such as point-of-sales, information kiosks, smart displays, document tracking, smart shopping and EAS at POS.

Article No.	Order Ref.	Description
311095	STIX-UHF-EU	Stix/UHF RFID (USB) EU

Physical Properties	
Width x Height x Depth (mm)	53 mm (W) x 7 mm (H) x 79 mm (D)
Weight (kg)	22 g
Reading distance	up to 1 m
Reading speed	200 tags / sec

## Product highlights

- Extra small RFID reader with USB connectivity
- Suitable for smartphones and tablets
- Easy installation
- USB powered



## BFA Antenna

### Advanced beam-forming overhead antenna

Brady BFA is an advanced beam-forming overhead antenna with 28 software-controlled beams and an integrated movement and direction detection sensor. All the beams can be enabled for the highest RFID reading coverage and accuracy, or only specific beams can be enabled to define a limited area of detection and reduce unwanted readings. Brady FR22 can be seamlessly connected and mounted on the back.

### Product highlights

- 28 software controlled antenna beams to provide multiple coverage shapes for different use cases or environments.
- High read accuracy due to multiple overlapping beams.
- Reliable object direction detection and environment mapping.
- Integrated loud buzzer and high visibility LEDs to provide user indications in track & trace and access control applications.
- VESA standard mounting.



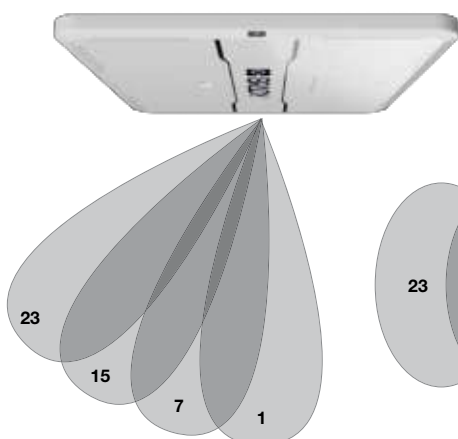
### Suitable application areas

- Real-time inventory
- Track and trace
- Access control
- RFID gates
- Doors and corridors

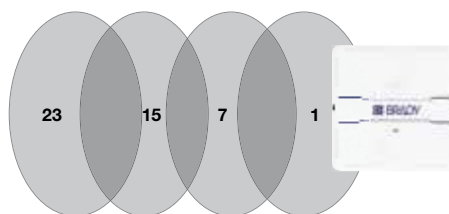


Article No.	Order Ref.	Description
311942	B-BFA-ANT-868	Brady BFA antenna 868
311945	B-FR22-RDR-BFA-EU	Brady FR22 + BFA 868 kit EU
311946	B-FR22-RDLTE-BFAEU	Brady FR22 LTE + BFA 868 kit EU

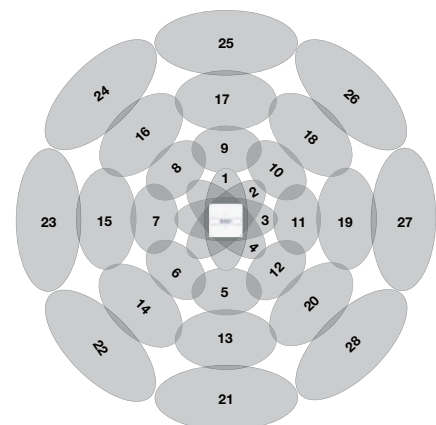
### Antenna beams radiation patterns (beams not represented in scale)



Side view of 1/8 of the beams



Top view of 1/8 of the beams



Top view position of the 28 beams (represented coverage is not real, as overlaps among beams is much higher than drawn here)

## BRADY GA25

Brady GA25 is a robust and extremely cost-efficient antenna with circular polarisation. This antenna can be mounted directly on all surfaces, even metal, without compromising UHF RFID reading performance.



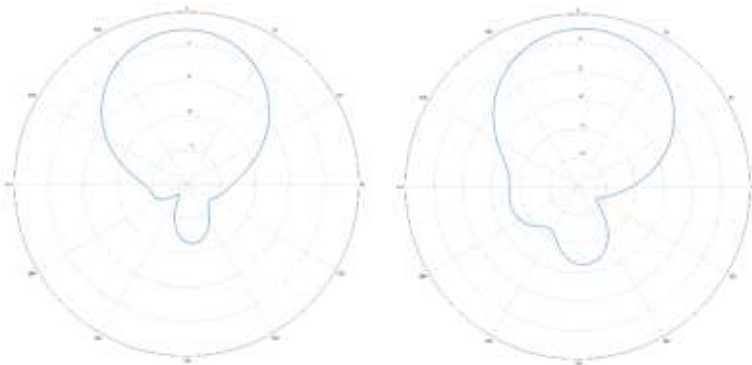
### Product highlights

- High gain to achieve the longest RFID reading distance
- Usable on all surfaces, including metal
- Good performance in every orientation
- VESA standard mounting

### Suitable application areas

- Asset tracking
- Inventory management
- People or vehicle access control
- Document tracking
- RFID gates
- RFID tunnels

Article No.	Order Ref.	Description
320032	B-GA25-ANT-EU	Brady GA25 antenna



Antenna radiation pattern

▶ Note about VESA fixing points: the maximum thread depth is 7 mm and the maximum allowed torque is 8 Nm.

## Brady GA30

Brady GA30 is a general-purpose antenna with a very high gain and is ideal for harsh environments where IP rating is needed. This antenna can be mounted directly on all surfaces, even metal, without compromising UHF RFID reading performance. Brady GA30 is a global band antenna with real circular polarisation, enabling it to be used at its maximum performance in any region worldwide and with any tag orientation. The modular fixed reader Brady FR22 attaches natively to the back of the Brady GA30.



Article No.	Order Ref.	Description
311941	B-GA30-ANT	Brady GA30 antenna
313665	B-FR22-RDR-GA30-EU	Brady FR22 Fixed RFID Reader EU with GA30 Antenna
313667	B-FR22LTE-GA30-EU	Brady FR22 Fixed RFID Reader LTE EU with GA30 antenna

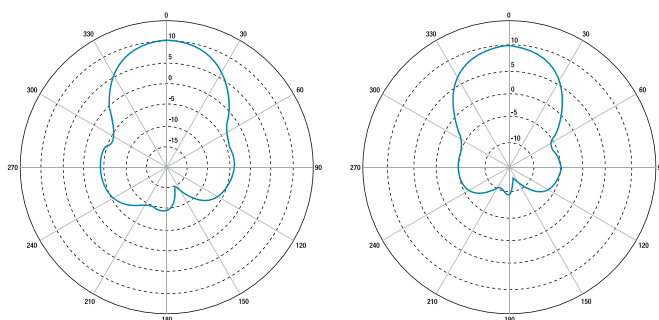
Article No.	Order Ref.	Description
313687	B-GA30-Backcivr-kit	Brady GA30 back cover kit

### Product highlights

- High gain to achieve the longest RFID reading distance
- Incredibly low axial ratio to provide the best performance in every orientation.
- Usable on all surfaces, including metal
- IP65 rating
- VESA standard mounting

### Suitable application areas

- Asset tracking
- Inventory management
- People or vehicle access control
- Document tracking
- RFID gates
- RFID tunnels



### Antenna radiation pattern



Note about VESA fixing points: the maximum thread depth is 7 mm and the maximum allowed torque is 8 Nm.



## SAMPO S0

Brady Sampo S0 is an antenna specifically designed for RFID applications. With these RFID antennas, it is easy to expand the reading coverage and improve the performance of the RFID system. Due to the antenna's matching design it fits perfectly together with the Brady ID Sampo S1 reader, which forms a coherent RFID system.

### Product highlights

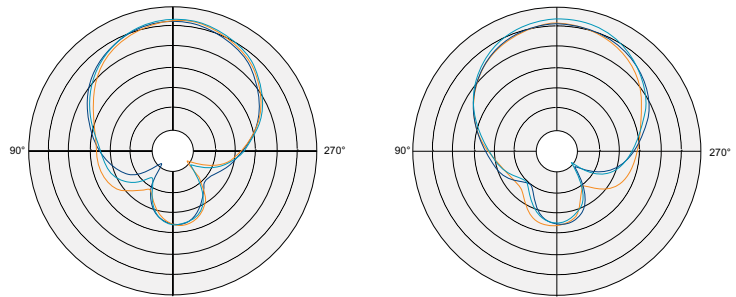
- High-gain circular polarization
- Fast and easy integration
- Integrated antenna

### Suitable application areas

- Smart shelves
- Inventory management
- Access control
- Document tracking
- RFID gates
- EAS



### Antenna radiation pattern



Article No.	Order Ref.	Description
311039	SAMPOSO-ANT-EU-US	Sampo S0 Antenna EU-US freq UHF RFID SMA

## GA25/GA30/Sampo S0 and FA3030e comparison

	GA25	GA30	Sampo S0	FA3030e
Size (mm)	250 x 250 x 29	300 x 300 x 33	200 x 260 x 25	300 x 300 x 6
Weight	560 gr	860 gr	438 gr	810 gr
Material	PC-ABS V0	PC-ABS V0	PC-ABS	ABS
Connector	SMA	SMA	SMA	SMA
Mounting	VESA 200	VESA 200 can mount FR22 on the back	Screws	Screws
Works on metal	Yes	Yes	Yes	Yes
Polarization	Circular	Circular	Circular	Circular
Freq. Range	ETSI or FCC	Global	Global	ETSI or FCC
VSWR	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1
Max gain	7.5dBic	10dBic	7dBic	6dBic
Beam width (-3dB)	65° / 65°	50° / 50°	80° / 80°	60° / 60°
Axial ratio	< 1dB	< 0.5dB	1dB	3dB
F/B ratio	15dB	20dB	10dB	23dB
IP rating	IP65	IP65	IP20 (indoor)	IP20 (indoor)

## Flat antenna FA1515E

The Brady FA1515e is ideal for environments where size constraints need to be taken into account. Due to its unique radiation pattern this flat antenna can be mounted directly on surfaces, even metal surfaces, without compromising UHF RFID reading performance.

### Product highlights

- Compact size that enables usage in solutions with size constraints
- Usable on all surfaces, including metal
- Consistently good reading performance even when the tags are placed directly on the surface

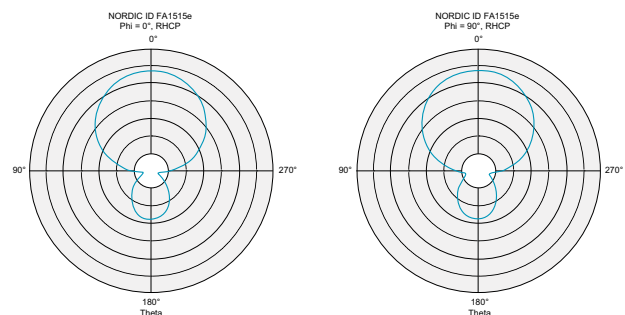


### Suitable application areas

- Commissioning
- Point-of-sales

Article No.	Order Ref.	Description
311011	FA1515E-UHF	Flat Antenna FA1515e 868/UHF RFID (SMA)

### Antenna radiation pattern



## Flat antenna FA3030E

The flat design of the Brady FA3030 is ideal for unobtrusive usage in retail environments. This flat antenna has an unique radiation pattern ensuring that the Brady FA3030 can be mounted directly on surfaces, even metal surfaces, without compromising UHF RFID reading performance.

### Product highlights

- Thin design that blends in well in different environments
- Usable on all surfaces, including metal
- Consistently good reading performance even when the tags are placed directly on the surface

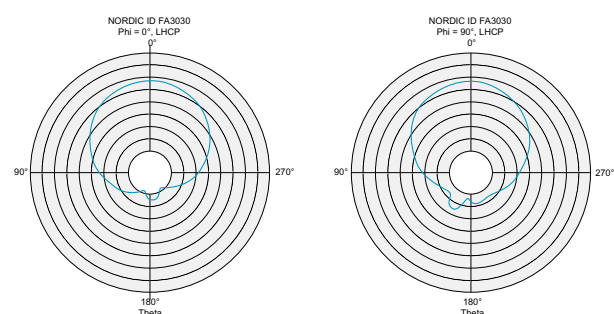


### Suitable application areas

- Smart shelves and cabinets
- Commissioning
- POS

Article No.	Order Ref.	Description
309991	309991	FLAT ANTENNA FA3030E 868/UHF RFID (SMA)

### Antenna radiation pattern



## Special antenna SA0408

The Brady SA0408 is ideal for environments where size limitations and IP rating need to be taken into account. Thanks to its unique design this antenna can be mounted directly on all surfaces, even on metal, without compromising UHF RFID reading performance.



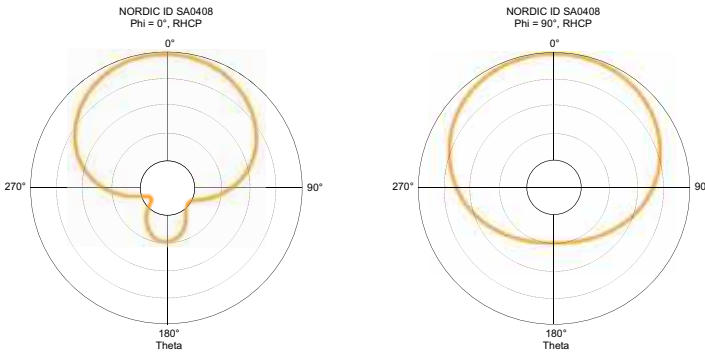
Article No.	Order Ref.	Description
311078	SA0408-ANT-UHF	Special Antenna SA0408 868/UHF RFID (SMA)

### Product highlights

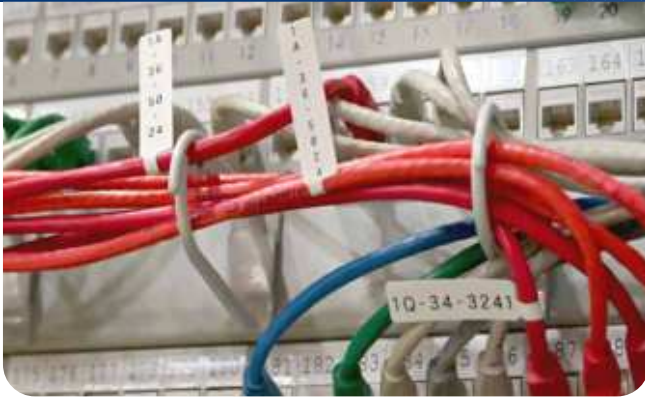
- Compact size yet excellent performance
- Usable on all surfaces, including metal
- IP65 rating

### Suitable application areas

- Commissioning
- Point-of-sales
- Manufacturing



### Antenna radiation pattern



## Complete portable HF kits

**Tired of searching for intervention information before jumping in?**

What if you could scan all assets at once, and automate entire room inventories? Use our portable RFID Kit to quickly set up any asset for extremely fast localisation.

### M610 HF QuickFlag kits

This kit includes an M610 label printer kit, an HH85 RFID reader, a roll of M6-218-483-HF and an M61-R6010 ribbon. The RFID encoding Toolbox app and Express labels app are free of charge downloadable onto the HH85.

Article No.	Order Ref.	Description
321838	M610-QY-EU-QF KIT	M610 HF QuickFlag kit QY EU



### M611 HF QuickFlag kits

This kit includes an M611 label printer kit, an HH85 RFID reader, a roll of M6-218-483-HF and an M61-R6010 ribbon. The RFID encoding Toolbox app and Express labels app are free of charge downloadable onto the HH85.

Article No.	Order Ref.	Description
321844	M611-EU-QF KIT	M611 HF QuickFlag kit EU



## Additional rolls of selected RFID labels available individually

Article No.	Order Ref.	Description
319493	M6-218-483-HF	HF QuickFlag™ Tapered Wire and Cable Flag for M610, M611, M710





## Complete portable RFID track & trace kits

**Tired of searching every nook and cranny to find a wayward asset?**

What if you could access all relevant cable documentation where the action is, on the cable itself? Use our portable RFID Kit to easily write and access data on NFC-enabled cable flags.



### M610 RFID Track & Trace kits

This kit includes an M610 label printer kit, an HH85 RFID reader, a roll of M6-221-423-UHF and an M61-R6010 ribbon. The RFID encoding Toolbox app and Express labels app are free of charge downloadable onto the HH85.

Article No.	Order Ref.	Description
321829	M610-QY-EU-T&T KIT	M610 RFID Track & Trace kit QY EU



### M611 RFID Track & Trace kits

This kit includes an M611 label printer kit, an HH85 RFID reader, a roll of M6-221-423-UHF and an M61-R6010 ribbon. The RFID encoding Toolbox app and Express labels app are free of charge downloadable onto the HH85.

Article No.	Order Ref.	Description
321835	M611-EU-T&T KIT	M611 RFID Track & Trace kit EU

## Additional rolls of selected RFID labels available individually

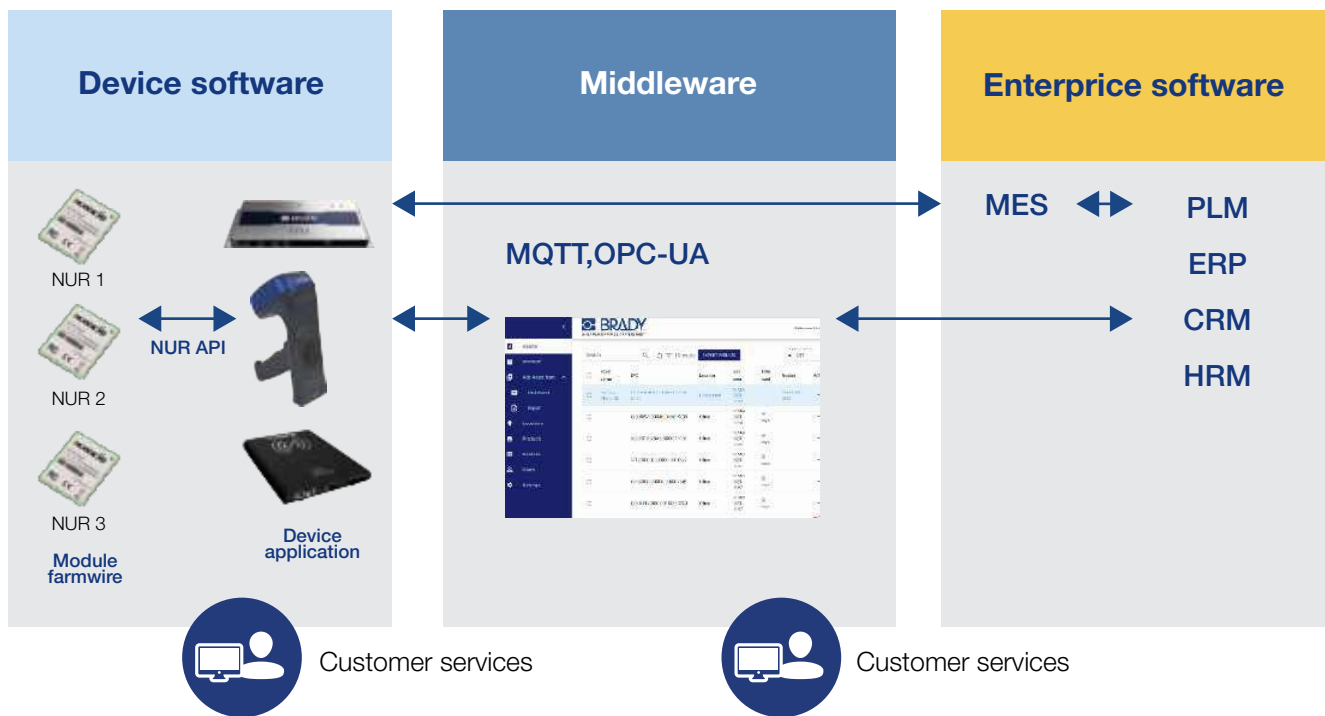


Article No.	Order Ref.	Description
321277	M6-221-423-UHF	Glossy White Polyester RFID Asset Tracking Labels

▶ Learn more at [www.bradyeurope.com/RFIDkits](http://www.bradyeurope.com/RFIDkits)



## Software overview



## Complete integration

Next to supplying standalone RFID solutions, our teams can also support complete integration with your existing systems.

Depending on your needs, applications and available expertise, integration with existing IT infrastructure can be realised in 3 ways:

### ► Bespoke software development

Our engineers can write a practical and clear application to see, filter and home in on RFID tags and labels within reader range. Windows, Android and web applications, a basic web service and database connectivity via .csv exports or custom API's are all possible.

### ► Software development kit

Our software development kit enables your system integrators and software developers to create unique integrations and applications. The software kit provides the capability to interface with the NurAPI present in Brady RFID hardware.

### ► RADEA.IO RFID platform

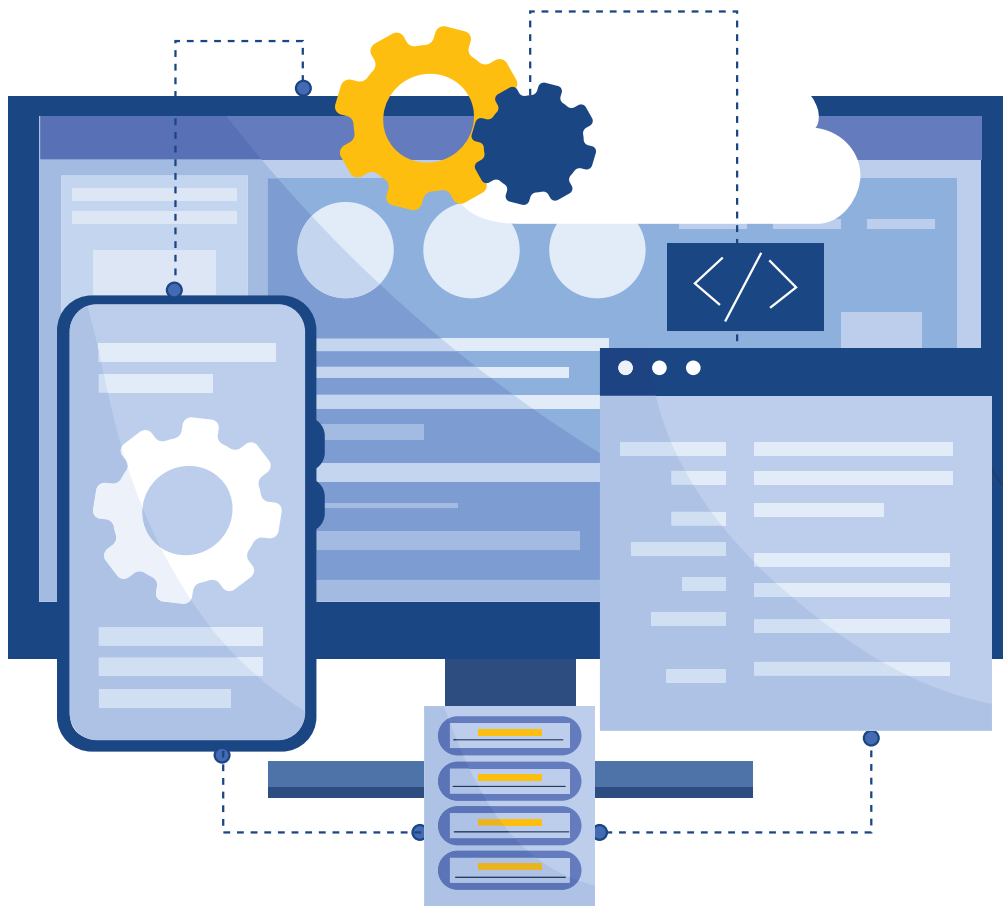
Automate inventory, item, product and/or asset tracking in 1 day with RADEA.IO, our intuitive, affordable, and highly customisable RFID automated inventory and item tracking software. RADEA.IO enables users to quickly create asset, product and item categories, to add locations, and to give these any name that optimally fits existing business processes.

## Product highlights

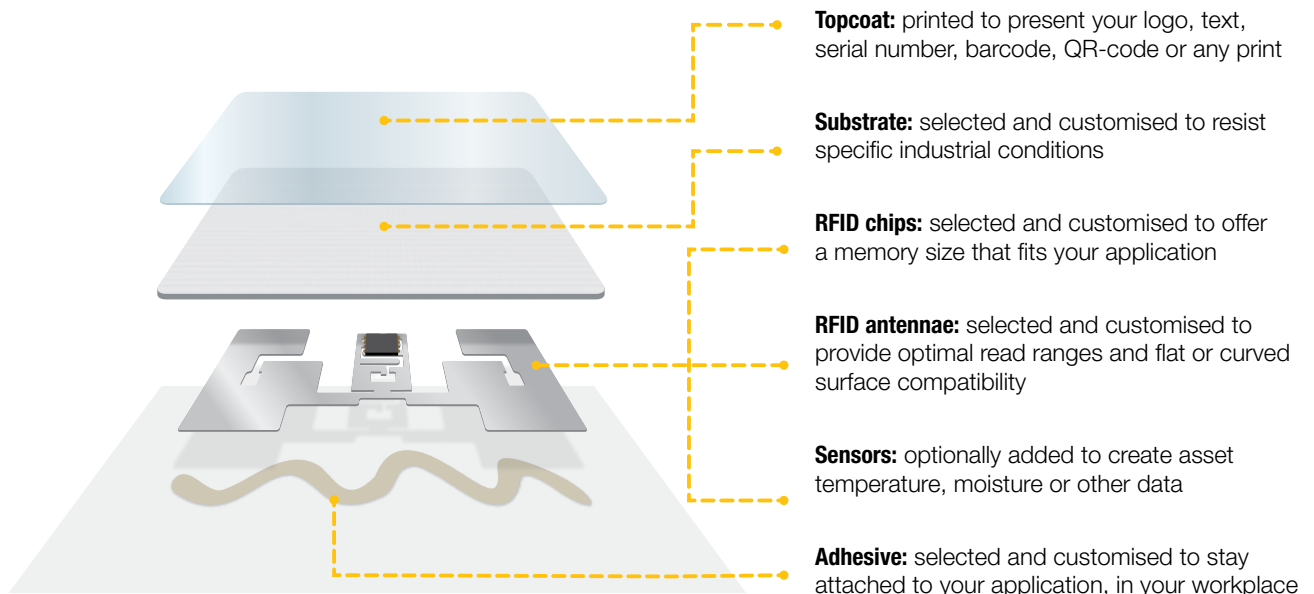
- create unlimited locations and sublocations
- auto-assign SKU's to categories
- create custom reports
- manage and configure RFID devices
- cloud application or on-premise installation
- feed to other systems via API

## Suitable application areas

- real-time inventories
- inventory audits
- item location tracking
- loss prevention
- automated item count
- decision making



## What is an RFID label?



## Every item a unique digital identity

Gain increased efficiency and improve the customer experience by giving any product a unique digital identity that enhances visibility throughout the supply chain, all the way to the end-customer.

Track and manage assets more efficiently in complex industrial environments with fully customisable RFID labels that can fit any surface. Let us design the optimal RFID labelling solution for you with select antennas, chips, label material, adhesive and print.







**Reliability:** our scientists design labels for maximum reliability in specific applications. We have a wide range of solutions readily available off-the-shelf, as well as the capabilities to solve new challenges.

Label materials determine how a label will behave when exposed to various processes that can involve heat, cold, chemicals, abrasion, moisture and radiation. Brady scientists have developed labels using a wide range of materials that stay intact and remain legible, even in challenging conditions.

Label constructions combine the traits of label substrate materials and adhesive types for maximum reliability in specific applications. For RFID labels, this includes adding an isolating layer to enable data transmission via radio signals when applied to a metal surface for example.



**Technology:** we can integrate battery-free RFID and NFC chips and antennas in our labels.

Radiofrequency Identification (RFID) labels with battery-free chips do not require maintenance and, depending on context, offer detectability up to 14 metres with fixed or handheld RFID readers, no line of sight required.

Near Field Communication (NFC) labels do not require maintenance and can be read and written in close proximity with recent smartphones. Just like our RFID labels, the NFC labels are powered by the reading devices.

Dual Frequency labels combine the advantages of UHF and HF labels in a single solution that can be read from a distance with an RFID reader, while still being accessible for a smartphone or tablet.



**Sensing:** a wide range of miniature sensors can optionally be integrated in battery-free RFID labels.

Moisture sensors embedded in RFID labels can signal a dry or wet state at specific intervals, or even every second to enable monitoring.

Temperature sensors integrated in battery-free RFID labels provide a temperature reading every time they receive and bounce back the signal from an RFID reader.



**Lighting:** our RFID labels can use the energy received by RFID readers to highlight labelled items.

LED lighting in battery-free RFID labels enables affordable pick to light systems. Select a detected item on the RFID reader and home in with sound and on-screen visuals until a blinking label LED light focuses attention on an asset or specific racking space.

## RFID labels overview



### Dual Frequency RFID Labels

Improve any product or item's supply chain management, authentication and end-user engagement with a single label



### Moisture Sensing RFID Labels

Moisture sensing RFID label comes with a capacitive sensor which detects moisture conditions on surfaces and data can easily be read with UHF RFID scanners



### Temperature Sensing RFID Labels

Easily monitor temperatures from a distance for one or multiple assets with low cost RFID Temperature Labels that do not require energy or maintenance



### Track and Trace RFID Labels

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








### LED RFID Labels

Enable "Pick to Light"-systems for easy picking: read desired items at a distance of up to 3.5 m to activate a specific label's LED light for fast item finding

## Track and Trace RFID Labels



					
<b>Label reference</b>	THT-UHF-B481-24x16	THT-UHF-B7425-65x6-0.5	THT-UHF-B7425-45x30	THT-UHF-B7425-53x26	THT-UHF-B423-53x26
<b>Article number</b>	309083	312403	309082	309081	307923
<b>RFID type</b>	UHF	UHF	UHF	UHF	UHF
<b>Markets</b>	Laboratory	General Laboratory Healthcare	General Laboratory Manufacturing Healthcare	General Laboratory Manufacturing Healthcare Transport & Logistics	General Manufacturing Healthcare Transport & Logistics
<b>Application</b>	Medical slide labelling	Laboratory labelling	Product ID & Product life cycle ID Specimen & Laboratory labelling Large conical bottles, tubes and well plates	Product ID & Product life cycle ID Specimen & Laboratory labelling Large conical bottles, tubes and well plates Medical equipment ID Distribution & Warehousing	Product ID & Product life cycle ID Medical equipment ID Distribution & Warehousing
<b>On-metal application</b>	No	No	No	No	No
<b>Quantity/roll</b>	500	500	500	500	500
<b>Dimensions</b>	24 x 16mm	65 x 6mm	45 x 30mm	53 x 26mm	53 x 26mm
<b>Face material</b>	Polyester (B-481)	Polypropylene (B-7425)	Polypropylene (B-7425)	Polypropylene (B-7425)	Polyester (B-423)
<b>Material reference</b>	L-2899-4C	L-2588-35C	L-2588-19A	L-2588-26B	L-2588-26C
<b>Read range</b>	Up to 2m	Up to 1m	Up to 6m	Up to 10m	Up to 11m
<b>EPC memory</b>	128 bits	128 bits	448 bits	128 bits	128 bits
<b>User memory</b>	512 bits	/	2048 bits	/	/
<b>Operating temperature</b>	-40 °C to 85 °C	-40 °C to 85 °C	-40 °C to 85 °C	-40 °C to 85 °C	-40 °C to 85 °C

## Track and Trace RFID Labels



				
THT-HF-B423-25x43	THT-UHF-PET-64x6	THT-NFC-PET-25x25	THT-UHF/HF-B423-66x46	THT-UHF/HF-B423-33x17
311514	309087	309086	310251	310250
HF	UHF	NFC	NFC + UHF	NFC + UHF
General Manufacturing Transport & Logistics	General Manufacturing Healthcare Data/Telecom	General Manufacturing Healthcare Data/Telecom	General Laboratory Manufacturing Healthcare Data/Telecom Transport & Logistics	General Laboratory Manufacturing Healthcare Data/Telecom Transport & Logistics
Product ID & Product life cycle ID Product Authentication Supply-chain management	Product ID & Product life cycle ID Medical equipment ID Distribution & Warehousing	Product ID & Product life cycle ID	Product ID & Product life cycle ID Specimen & Laboratory labelling Medical equipment ID Distribution & Warehousing	Product ID & Product life cycle ID Specimen & Laboratory labelling Medical equipment ID Distribution & Warehousing
No	Yes	Yes	No	No
500	500	500	500	500
25 x 43mm	64 x 6mm	25 x 25mm	66 x 46mm	33 x 17mm
Polyester (B-423)	Polyester	Polyester	Polyester (B-423)	Polyester (B-423)
L-2588-31B	L-2588-27C	L-2588-25B	L-2588-27C	L-2588-27D
Up to 2cm	Up to 3m	Up to 2cm	Up to 5m (UHF) Up to 2cm (NFC)	Up to 2,8m (UHF) Up to 2cm (NFC)
/	128 bits	/	128 bits	480 bits
2560 bits	/	144 bytes	160 bits (UHF) 1920 bits (NFC)	2048 bits (UHF, HF)
-40 °C to 85 °C	-40 °C to 85 °C	-35 °C to 85 °C	-40 °C to 85 °C	-40 °C to 85 °C



## Sensing RFID Labels



<b>Label reference</b>	THT-UHF-B423-93x26	THT-NFC-NM-B423-45X45-0.1-T	THT-NFC-M-B423-45X45-0.1-T	THT-UHF-B423-42x85	THT-UHF-B430-99x7-0.1
<b>Article number</b>	309085	321275	321276	311513	312401
<b>RFID type</b>	UHF	NFC	NFC	UHF	UHF
<b>Markets</b>	General Manufacturing Warehousing Healthcare	General Manufacturing	General Manufacturing	General Manufacturing Construction Transport & Logistics	Transport & logistics Warehousing
<b>Application</b>	Temperature monitoring	Temperature monitoring	Temperature monitoring	Moisture sensing Leak detection Water proofing	RFID labelling General identification Asset tracking
<b>On-metal application</b>	No	No	Yes	No	No
<b>Quantity/roll</b>	100	100	100	100	100
<b>Dimensions</b>	93 x 26mm	45 x 45mm	45 x 45mm	42 x 85mm	99 x 7mm
<b>Face material</b>	Polyester (B-423)	Polyester (B-423)	Polyester (B-423)	Polyester (B-423)	Polyester (B-430)
<b>Material reference</b>	L-2899-8A		L-2588-31B	L-2588-32A	L-2588-35A
<b>Read range</b>	Up to 9m	Up to 5cm	Up to 5cm	Up to 2.7m	Up to 15.5m
<b>EPC memory</b>	128 bits	/	/	96 bits	160 bits
<b>User memory</b>	176 bits	320 bytes	320 bytes	2000 bits	1312 bits
<b>Operating temperature</b>	-40 °C to 85 °C	-40 °C to 85 °C	-40 °C to 85 °C	-40 °C to 85 °C	-40 °C to 85 °C

## Hardware installation

A robust RFID solution involves a personalised approach. Given the unique nature of each use case, RFID projects provide an exciting opportunity to tailor solutions precisely.

### Proof of concept

To enable optimal decision making, to test and to finetune your RFID setup, we offer a proof of concept and/ or a pilot deployment at your premises. Invite your stakeholders and solution users to experience first hand the advantages of automated item tracking, fast asset localisation, automated inventories and much more.



### Complete installation

With an agreed on proof of concept, we start implementing and connecting the RFID readers that will enable your automated tracking solution. In addition, we can install any software, both on readers and computers, to integrate your RFID solution in existing ICT infrastructure.

We can also equip your facilities with the capability to print and program additional RFID labels, and provide training to users.

## RFID support & repairs

Experienced developers and hardware specialists are the beating heart of our technical services. Solution-oriented and customer focused, they will investigate, analyse and solve any challenges you might encounter during the lifetime of your solution.

### Support

Our experienced developers know your Brady RFID configuration inside out, and can walk you through a series of steps to quickly solve your issue. Most issues are solved based on pictures of applied RFID labels in your business context. If necessary, our support team can help write new source code to enable integration of your RFID system with specific applications.

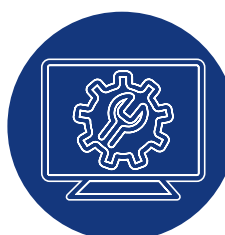


[tseurope@bradycorp.com](mailto:tseurope@bradycorp.com)

- Free to use if you own a Brady RFID product
- Intervention via API or at your premises (travel cost charged separately)
- Service Level Agreement possible for larger RFID configurations
- Product lifetime support (product end of life date + 5 years)

### Repairs

Our technical repairs team can solve any RFID hardware issues you might encounter, including RFID reader battery and antenna replacement. We will test and analyse returned RFID equipment in our laboratories to solve hardware challenges and to send your solution back in full working order.



[tseurope@bradycorp.com](mailto:tseurope@bradycorp.com)

- Free to use within a 2 year warranty period
- Ship back for complete testing and repairs
- Quoted per repair outside of warranty
- Product lifetime support (product end of life date + 5 years)



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Our mission is to identify and protect people,  
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