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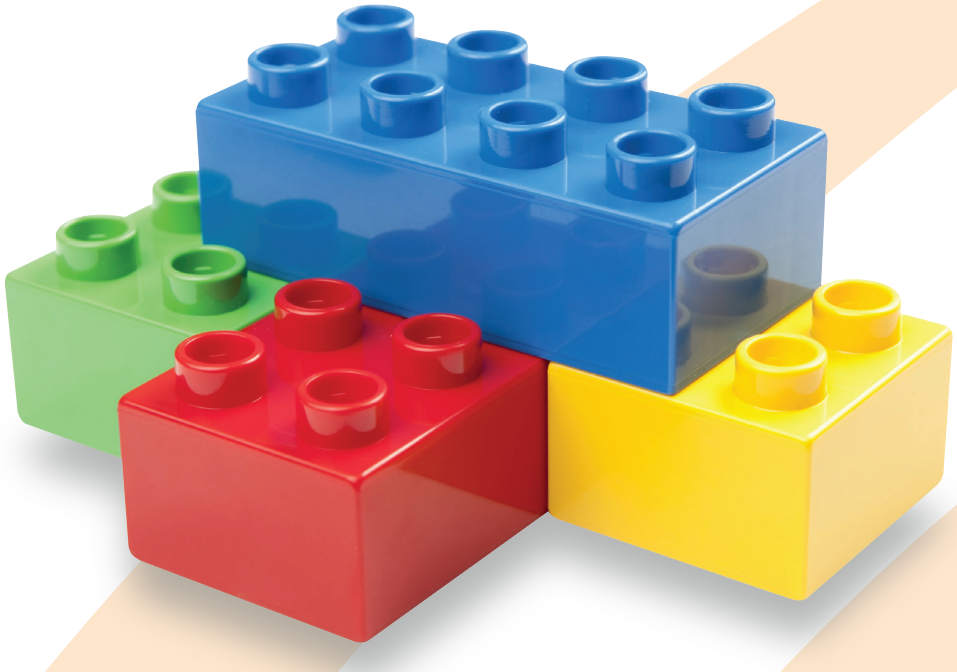
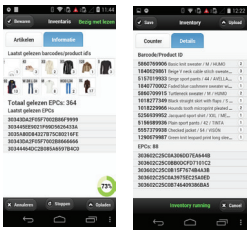
Your RFID building blocks



Your RFID building blocks

Automatic inventory sytems



AdvanScan™ : RFID inventory and encoding system with Android handheld reader and direct upload of data to the cloud

See: data sheet, video

AdvanScan is an Android handheld RFID reader system, that obtains the inventory of products in a space with a high read-rate (typically above 99 %), and uploads the inventory data to the cloud (AdvanCloud).

AdvanScan can encode RFID tags, and can also print RFID soft tags by using it together with AdvanPrint.

AdvanScan works with WiFi and avoids the need to use any local computer. It's plug & play.

Benefits:

- Increase of product availability
- Reduction of out-of-stocks
- Reduction of shrinkage
- Very easy to use: requires no installation, and needs only 3 clicks to make an inventory and upload it to the cloud
- Plug & play
- No need of an external computer

AdvanRobot ™: Automatic inventory robot

See: data sheet, video

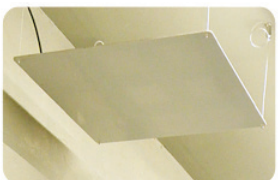
AdvanRobot is a mobile and autonomous RFID system that performs automatically the inventory of a given space, for instance, a retail store or a low-ceiling warehouse.

AdvanRobot can move in all directions, since it can rotate without displacement. Therefore, it can easily move around any given space.

The movement of AdvanRobot is synchronized with the tag reading in order to maximize read rate

Benefits:

- Cost reduction in inventory taking
- Increased accuracy compared to handheld readers
- Fast and easy detection of misplaced items
- Acceleration of picking for return management
- Easily moves around any given space
- Synchronized tag reading and movement
- High read rate



AdvanTrack ™ : Overhead real-time inventory system

See: data sheet

AdvanTrack is a RFID-based system that provides inventory in real time and the approximate location of each tagged item across a given space.

AdvanTrack comprises a set of overhead antennas, interconnected by means of RFID multiplexers and readers.

Each antenna covers an area of approximately 3 metres diameter, and detects the tags located under its area of interrogation.

Benefits:

- Persistent inventory
- Reduction of stock-outs
- Fast location of products
- Detection of misplaced items
- Shrinkage reduction

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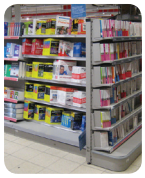
Your RFID building blocks

Automatic inventory sytems

AdvanShelf™, AdvanDisplay™ : Smart shelves, smart displays, smart showcases

See: data sheet

AdvanShelf is a smart shelf system based on RFID UHF, that provides inventory in real-time, with high read-rate and high location resolution.

In addition, AdvanShelf provides real-time location of tagged items, with a typical resolution of ±40cm (±15 inches).

This functionality can be used to detect misplaced items, locate any item, generate a real-time planogram, etc.

Benefits:

- Reduction of stock-outs and misplaced items
- Fast location of products
- Interaction with customers
- Fast picking of products for returns
- Calculation of sales per shelf position
- More efficient vendor-managed inventory
- Shrinkage reduction


AdvanPanel ™ : Smart panel for Kanban cards

See: data sheet

AdvanPanel is a smart panel based on RFID UHF, that detects in real-time the tagged Kanban cards placed on such panel, with a high read-rate (typically 99.5% - 100%).

In addition, AdvanPanel is able to avoid detecting other tagged Kanban cards that are not placed on the panel, even if these cards are at a close physical distance from the panel.

A very common application of AdvanPanel is inventory management of medical products in hospitals.

Benefits:

- Real-time inventory information
- Reduction of out-of-stocks
- Cost reduction in staff (manual inventories and visual observation of Kanban cards are avoided)
- Low investment
- Low tag costs (items are not tagged, only Kanban cards, and they are reused)
- Non visible antennas
- Easy to install

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Your RFID building blocks

Interactive retail sytems

AdvanLook™ : Interactive recommendation system

See: data sheet, video

AdvanLook is an interactive display and product recommendation and cross-selling system.

AdvanLook uses RFID technology and a display to improve the shopping experience of customers at retail stores or libraries.

Customers see images of the products they have picked up, detailed information about these products and receive product recommendations. AdvanLook is available in 3 sizes (21'', 42'', 46'')

With AdvanCloud, the content and user interface of AdvanLook can be remotely updated.

Benefits:

- Increases sales at retail stores
- Improves the customer shopping experience
- Provides recommendations
- Generates information about user interests
- The frame colour and material can be chosen
- The content and user interface can be updated remotely

AdvanLook-M™ : Interactive recommendation system with screen-mirror integration

See: data sheet, video

AdvanLook-M is a product recommendation and cross-selling system for retail stores.

AdvanLook-M uses RFID technology and a touch screen integrated with a mirror to improve the shopping experience of customers at retail stores or libraries.

Customers, next to their reflection, see images of the products they have picked up, detailed information about these products and receive product recommendations.

With AdvanCloud, the content and user interface of AdvanLook-M can be remotely updated.

Benefits:

- Increases sales at retail stores
- Improves the customer shopping experience
- Provides recommendations
- Generates information about user interests
- The content and user interface can be updated remotely

AdvanLook-LT™ : Interactive recommendation system with tray

See: data sheet, video

AdvanLook-LT is an interactive display, product recommendation and cross-selling system, ideal for cosmetics, footwear, wine, etc.

AdvanLook-LT uses RFID technology and a display to improve the shopping experience of customers at retail stores.

Customers see images of the products they have placed on AdvanLook-LT tray, detailed information about these products, benefits, experts' advices, videos of how to use products and receive product recommendations.

With AdvanCloud, the content and user interface of AdvanLook-LT can be remotely updated.

Benefits:

- Increases sales at retail stores
- Improves the customer shopping experience
- Provides recommendations
- Generates information about user interests
- The frame colour and material can be chosen
- The content and user interface can be updated remotely

Your RFID building blocks

Interactive retail sytems

AdvanLift™ : Lift and learn interactive system

See: data sheet

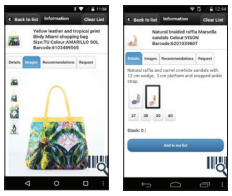
AdvanLift is a product recommendation and cross-selling system with tray ideal for cosmetics, footwear, wine, etc.

AdvanLift uses RFID technology and, optionally, an interactive screen to improve the shopping experience of customers at retail stores.

By simply picking up a product from the tray of AdvanLift, customers see benefits, experts' advice, videos of how to use the product, and recommended products

Benefits:

- Increases sales at retail stores
- Improves the customer shopping experience
- Provides recommendations
- Generates information about user interests
- The content and user interface can be updated remotely



AdvanServe™ : Portable product recommendation system

See: data sheet, video

AdvanServe is a portable product recommendation and cross-selling system for retail stores, based on a smart phone or tablet.

The shop assistant uses AdvanServe to show customers images of the products, detailed information about these products and product recommendations.

With AdvanCloud, the content and user interface of AdvanServe can be remotely updated.

AdvanServe is also available with a pocket RFID reader.

Benefits:

- Increases sales at retail stores
- Improves the customer shopping experience
- Provides recommendations
- Generates information about user interests
- The content and user interface can be updated remotely

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Your RFID building blocks

Interactive retail sytems

AdvanFitting ™ : Interactive system for fitting rooms based on RFID

See: data sheet, video

AdvanFitting is an RFID-based interactive system for fitting rooms at retail stores.

AdvanFitting uses RFID technology and a touch screen to improve the shopping experience of customers at retail stores.

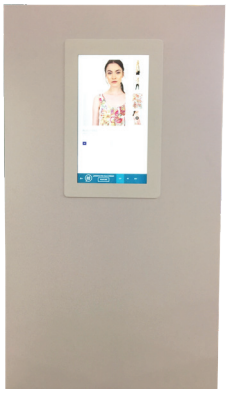
When customers enter the fitting room, images of the products they carry appear on the touch screen, with recommendations.Customers can request other sizes or colours without leaving the fitting room.

With AdvanCloud, the content and user interface of AdvanFitting can be remotely updated.

AdvanFitting uses special antennas and software for minimizing cross-reads.Can be used with AdvanPaint for futher reducing cross-reads.

Benefits:

- Increases sales at retail stores
- Improves the customer shopping experience
- Fun to use
- Generates information about user interests
- The frame colour and material can be chosen
- The content and user interface can be remotely updated
- Easy connection and installation



AdvanFitting-300 ™ : Interactive system for fitting rooms based on RFID

See: data sheet, video

AdvanFitting-300 is a cost-effective RFID-based interactive system for fitting rooms at retail stores.

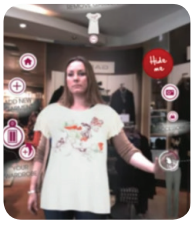
AdvanFitting uses RFID technology and a touch screen to improve the shopping experience of customers at retail stores.

The AdvanFitting unit is installed on the wall of the fitting room. The system is recessed into the wall, so all the electronics are hidden.

With AdvanCloud, the content and user interface of AdvanFitting can be remotely updated.

Benefits:

- Increases sales at retail stores
- Improves the customer shopping experience
- Cost-efficient
- Generates information about user interests



AdvanMirror ™ : Virtual fitting room based on RFID and augmented reality

See: data sheet, video

AdvanMirror is a virtual fitting room that combines RFID technology and augmented reality in order to improve the customer shopping experience and increase retailers' sales.

By using AdvanMirror, shoppers can try on garments like shirts, jackets, trousers, blouses, skirts, dresses, etc. in a virtual way, that is, without the need to go to a fitting room and undress.

Customers can make a first selection on the garments they prefer, and then go to the fitting room to verify which size fits them better.

AdvanMirror can overlap garments in an intelligent way, that is, a jacket will be shown overlapping a shirt, a blouse, or trousers.

Benefits:

- Sales increase
- Reduction of queues at traditional fitting rooms
- Improved customer shopping experience
- Easy and fast conversion of garment pictures in the retailer's catalogue into 3D images

Loss prevention sytems

AdvanSafe ™ : Overhead loss prevention system

See: data sheet, video

AdvanSafe is a loss prevention UHF antenna with an embedded reader and alarm combining EAS and RFID functions in one system.

The antennas have circular polarization and a radiation pattern characterized by a narrow beamwidth in the longitudinal direction, and a wide beamwidth in the transversal direction.

This radiation pattern allows to maximize the reading of products passing below the antennas, while minimizing the reading of other products.

Benefits:

- Improved store aesthetics, by having a store entrance free from obstacles
- Shrinkage reduction
- Combination of loss-prevention and product identification in one system
- Provides data to detect which product suffer more theft attempts
- Very quick detection
- Continuous detection field
- One master unit can be connected to 1,2 or 3 slave units, which reduces costs
- Plug and play installation

AdvanSafe-200 ™ : Overhead loss prevention system with beam steering

See: data sheet, video

AdvanSafe-200 is a loss prevention UHF antenna with an embedded reader and alarm combining EAS and RFID functions in one system.

AdvanSafe detects the tagged items that pass below the antenna, verify if those items have been paid, and triggers an acoustic and/or visual alarm if any item has not been paid.

Thanks to its beam steering, AdvanSafe detects which tags are static tags and which are moving tags, in order to avoid false alarms.

Benefits:

- Improved store aesthetics, by having a store entrance free from obstacles
- Decrease in false alarms thanks to beam steering
- Shrinkage reduction
- Combination of loss-prevention and product identification in one system
- Provides data to detect which product suffer more theft attempts
- Very quick detection
- Continuous detection field
- Plug and play installation

AdvanMat-200 ™ : Floor mat with embedded antennas

See: data sheet, video

AdvanMat-200 integrates four high performance RFID UHF antennas inside a floor mat. The mat is able to support the weight of human bodies while maintaining the functionalities of the antennas.

The antennas have circular polarization and a radiation pattern characterized by ay a narrow beamwidth in the longitudinal direction, and a wide beamwidth in the transversal direction.

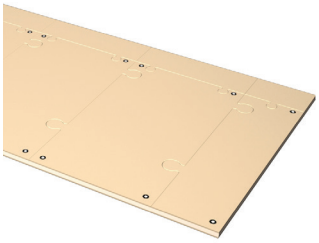
This radiation pattern makes this system ideal for tracking people and objects and for RFID applications such as loss prevention systems, races, portals, corridors, doors, etc.

Benefits:

- Non visible antennas
- Easy to install
- Easy connection to any reader

Your RFID building blocks

Loss prevention sytems



AdvanMat-300 ™ : Modular RFID floor mat

See: data sheet, video

AdvanMat-300 is a high performance modular RFID floor mat that integrates multiple UHF RFID antennas inside a floor mat, for tracking people or objects. AdvanMat is able to withstand 500 kg while maintaining the functionalities of the antennas.

The antennas have circular polarization and a radiation pattern characterized by ay a narrow beamwidth in the longitudinal direction, and a wide beamwidth in the transversal direction.

This radiation pattern makes this system ideal for tracking people and objects and for RFID applications such as loss prevention systems, races, portals, corridors, doors, etc.

Benefits:

- High flexibility
- Non visible antennas
- Easy to install
- Easy connection to any reader

AdvanGuard™ : RFID alarm unit

See: data sheet, video

AdvanGuard is an RFID alarm unit for loss prevention at retail stores, libraries and other spaces.

It comprises an embedded reader and alarm combining EAS and RFID functions in one system. It connects easily to various RFID antennas.

It is ideal for combining it with AdvanMat RFID floor mat, for creating a complete loss prevention system.

Benefits:

- Shrinkage reduction
- Combination of loss-prevention and product identification in one system
- Provides data to detect which product suffer more theft attempts
- Connects easily to various RFID antennas
- Very quick detection
- Continuous detection field
- Plug and play installation

AdvanGate ™ : RFID pedestal for loss prevention

See: data sheet, video

AdvanGate is a loss prevention pedestal system that includes RFID antennas, an embedded reader and alarm.

The antennas have circular polarization and a radiation pattern characterized by ay a narrow beamwidth in the longitudinal direction, and a wide beamwidth in the vertical direction.

This radiation pattern allows to maximize the reading of products passing through the pedestals, while minimizing the reading of other products.

Benefits:

- Shrinkage reduction
- Combination of loss-prevention and product identification in one system
- The pedestals can be separated up to 4 metres
- Provides data to detect which product suffer more theft attempts
- Very quick detection
- Continuous detection field
- Plug and play installation

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Your RFID building blocks

Point of sale RFID systems / desktop readers

AdvanPay-110 ™ : High power RFID desktop reader with keyboard wedge

See: data sheet, video

AdvanPay-110 is a high power RFID UHF desktop reader which integrates:

- An antenna with a highly confined reading area
- Keyboard emulation by hardware. It's not needed to install any software at the POS
- Functionalities specifically designed to address the needs of retailers, libraries or other spaces.

AdvanPay-110 comes in two models:

1. Flush mount (installed recessed in surface)
2. Under mount (installed underneath the surface)

Benefits:

- Highly confined reading area
- Automatic integration with most software applications, through hardware keyboard emulation
- For retailers:
  - Queues reduction, thanks to a much faster payment process
  - Improved customer shopping experience, derived from a shorter payment time
  - Reduction in employee costs
  - Simultaneous item detection and EAS flag activation/deactivation

AdvanPay-160™ : High power RFID reader with hard tag detacher and keyboard wedge

See: data sheet, video

AdvanPay-160 is a high power RFID desktop reader with hard tag detacher which integrates:

- An antenna with a highly confined reading area
- A hard tag detacher
- Keyboard emulation by hardware. It's not needed to install any software at the POS
- Functionalities specifically designed to address the needs of retailers, libraries or other spaces.

AdvanPay-160 merges two processes: hard tag detachment and product identification.

Benefits:

- Highly confined reading area
- Combines two processes (hard tag detachment and product identification)
- Automatic integration with most software application, through hardware keyboard emulation
- For retailers:
  - Queues reduction, thanks to a much faster payment process
  - Improved customer shopping experience, derived from a shorter payment time
  - Reduction in employee costs
  - Simultaneous item detection and EAS flag activation/deactivation

AdvanSpeaker: External speaker for AdvanPay-110 and AdvanPay-160

AdvanPay can be connected to an **external speaker** to increase the volume of the beep.

External controller: External controller for AdvanPay-110 undertable mount

AdvanPay can be connected to an **external controller** for changing the operation mode, and for turning AdvanPay on and off.

Your RFID building blocks

RFID encoding systems

AdvanStation ™ : RFID tag encoding station

See: data sheet, video

AdvanStation is an encoding station for paper and hard RFID UHF tags that easily and quickly encodes hundreds or thousands of RFID tags at retail stores, offices, distribution centers, warehouses, or other spaces.

AdvanStation works stand alone. It does not require any connection to an external computer or to Internet, nor any installation. It only needs to be powered, and it starts encoding.

AdvanStation can encode the RFID tags with password protection.

Benefits:

- Easy, fast and effective encoding
- Stand alone: encodes anywhere
- Plug and play
- Compatible with hard tags and paper tags
- Reduction of errors in tag encoding
- Password protection

AdvanStation-200 ™ : RFID tag encoding station with touch screen

See: data sheet

AdvanStation-200 is an encoding station for paper and hard RFID UHF tags.

AdvanStation-200 can also kill tags that have been encoded by error and need to be discarded, to prevent them from being read by the inventory management systems.

The screen shows information about the product that has been encoded.

AdvanStation-200 can encode RFID tags with password protection

Benefits:

- Easy, fast and effective encoding
- Easy to use, through a touch screen
- Very easy to install
- Can kill tags
- Compatible with hard tags and paper tags
- Actionable data

AdvanPrint ™ : Automatic encoding and printing solution for soft tags with an RFID printer and direct connection to the cloud

See: data sheet

AdvanPrint is a printing and encoding solution for soft RFID UHF tags, that can be used at retail stores, offices, distribution centers, warehouses, and other spaces.

AdvanPrint works together with the AdvanScan handheld reader. By scanning items with the handheld reader, AdvanPrint prints and encodes the corresponding RFID tags.

AdvanPrint does not require any connection to an external computer, nor any installation. It only needs to be powered and connected to WiFi.

The printer configuration can be changed at any time from the cloud (AdvanCloud).

Benefits:

- Fast and effective printing and encoding
- Very easy to use: requires no installation, and needs only 3 clicks to scan and print
- Plug & play
- No need of an external computer

Your RFID building blocks

Cloud-based software platform

AdvanCloud ™ : Cloud-based software platform for AdvanLook and AdvanFitting

See: data sheet

AdvanCloud is a cloud-based software platform for managing remotely the content of Advanlook recommendation system and AdvanFitting interactive fitting room system.

All the RFID events and interaction events between the shopper and AdvanLook/AdvanFitting are recorded and stored in AdvanCloud.

With AdvanCloud, Keonn partners can provide new services to retailers: upload and update contents, modify the user interface of AdvanLook and AdvanFitting, develop dashboards and reports, and apply business intelligence techniques on the interaction data.

Benefits:

- Easy and efficient management of content and user interface
- High scalability and flexibility
- Reduction of spending on technology infrastructure
- Reduction of operational and maintenance costs
- Simplicity: no need to manage multiple software licenses
- Integrated pricing, including software application, data hosting and software technical support

AdvanCloud ™ : Cloud-based software platform for:

- **AdvanScan**: RFID handheld readers
- **AdvanPrint**: RFID printers
- **AdvanShelf**: Smart shelf systems
- **AdvanServe**: Smart phones and tablets
- **AdvanSafe**, **AdvanEAS**: Loss prevention systems
- **AdvanPay**: Point of Sale systems

See: data sheet

AdvanCloud is a cloud-based software platform for managing the systems listed above.

With AdvanCloud, these systems can be easily configured and monitored in real-time from anywhere and with any device connected to Internet.

All the RFID events and data generated by these systems are recorded and stored in AdvanCloud.

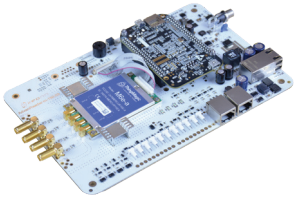
With AdvanCloud, Keonn partners can provide new services to retailers: develop dashboards and reports, trigger business actions, and apply business intelligence techniques on the RFID data.

Benefits:

- High scalability and flexibility
- Reduction of spending on technology infrastructure
- Reduction of operational and maintenance costs
- Single repository for all the data generated by Keonn systems
- Simplicity: no need to manage multiple software licenses
- Integrated pricing, including software application, data hosting and software technical support

Your RFID building blocks

RFID Readers



AdvanReader-150 ™ : RFID UHF reader with an on-board Linux computer

See: data sheet

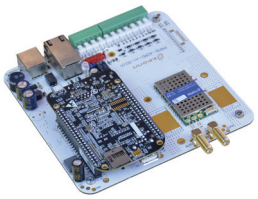
AdvanReader-150 is a high power (31,5 dBm), high performance UHF reader with an on-board microcomputer (Linux machine). You can program your own software routines on AdvanReader-150, saving the need and cost of an external computer. AdvanReader-150 is also prepared to work with batteries and control the battery level. It has a sleep mode for minimizing consumption. It is therefore ideal for mobile systems. AdvanReader comes with two models: 2-port 30 dBm power output, and 4-port 31,5 dBm power output.

AdvanReader-150 also includes:

- Communication interfaces: Ethernet, WiFi, USB HID, 3G
- 2 digital inputs and 2 analog inputs
- 5 digital outputs
- Output for connecting up to four multiplexers of 4 ports, 8 ports, 12 ports or 16 ports
- Output for 2 W loudspeaker
- On-board buzzer

Benefits:

- Saves the costs of an external computer
- Optimized for working with batteries
- High-performance: high output power and high sensitivity
- Reduces time and cost of developing RFID systems.
- Direct connection to AdvanMux multiplexers



AdvanReader-60 ™: 1 or 2-port RFID UHF reader with on-board computer and open Linux OS

See: data sheet

AdvanReader-60 is a flexible UHF reader with an on-board microcomputer and a fully open Linux operating system.

AdvanReader-60 comes with two models:

- 1-port, 27 dBm maximum output power
- 2-port, 30 dBm maximum output power

Thanks to its on-board microcomputer, AdvanReader-60 can work stand-alone, without needing to be connected to an external computer, thereby reducing equipment costs, installation costs, and maintenance costs.

Benefits:

- High flexibility (1 or 2 ports)
- On board computer with fully open Linux OS
- Small form factor
- Acts as HID USB device

AdvanReader-10 ™: USB RFID reader

See: data sheet

AdvanReader-10 is a small form factor, lightweight, high performance USB reader with an integrated antenna (optional).

AdvanReader-10 comes with two models:

- with embedded ceramic antenna
- with a SMA connectors to operate with any antenna

Benefits:

- High performance
- Small form factor
- With optional embedded antenna

Your RFID building blocks

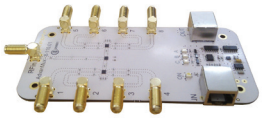
Multiplexers

AdvanMux-4 ™ : RFID multiplexer, four ports

See: data sheet

AdvanMux-4 is a high performance 4 port multiplexer that expands by a factor 4 the number of antennas that can be connected to each port of an RFID reader.

AdvanMux-4 is easy to connect to practically every RFID reader in the market, including Keonn, AdvanReader, Impinj, Sirit, Motorola, ThingMagic Mercury6, and others.

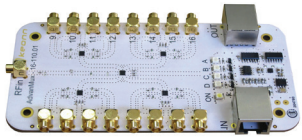


AdvanMux-8 ™ : RFID multiplexer, eight ports

See: data sheet

AdvanMux-8 is a high performance 8 port multiplexer that expands by a factor 8 the number of antennas that can be connected to each port of an RFID reader.

AdvanMux-8 is easy to connect to practically every RFID reader in the market, including Keonn, Impinj, Sirit, Motorola, ThingMagic Mercury6, and others.



AdvanMux-16 ™ : RFID multiplexer, sixteen ports

See: data sheet

AdvanMux-16 is a high performance 16 port multiplexer that expands by a factor 16 the number of antennas that can be connected to each port of an RFID reader.

AdvanMux-16 is easy to connect to practically every RFID reader in the market, including Keonn, Impinj, Sirit, Motorola, ThingMagic Mercury6, and others.

Benefits of Keonn multiplexers:

- Reduce the cost of RFID applications with many antennas
- Very fast and easy connection
- Compatible with most reader models
- Easy selection of ports by sending proper commands to the reader
- Easy control of several multiplexers by interconnecting them with standard Ethernet cables
- Low insertion loss

Your RFID building blocks

Power splitters

AdvanSplitter-2 ™ : RFID power splitter, 2 ports

See: data sheet

AdvanSplitter-2 is a high performance two port power splitter designed for RFID UHF applications.

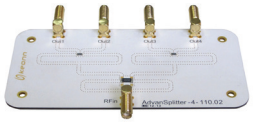
AdvanSplitter can be used to combine different Keonn antennas in new ways, creating new antennas with longer read range and narrower beamwidth, adapted to the needs of any RFID application.

For instance:

- Two Advantenna-p14 (antenna array of 1 x 4 elements) can be connected to AdvanSplitter to create an antenna array of 1 x 8 elements
- Two Advantenna-p33 (antenna array of 3 x 3 elements) can be connected to AdvanSplitter to create an antenna array of 3 x 6 elements

Benefits:

- Can create new antenna configurations and find the optimal antenna solution for any RFID project
- Very fast and easy connection
- Very low insertion loss
- Capable of supporting unbalanced loads



AdvanSplitter-4 ™ : RFID power splitter, 4 ports

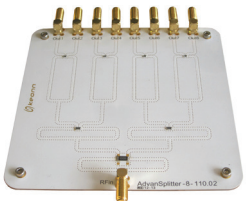
See: data sheet

AdvanSplitter-4 is a high performance four port power splitter designed for RFID UHF applications.

AdvanSplitter can be used to feed up to 4 antennas simultaneously, for instance, in order to scan an area much faster than using multiplexers.

Benefits:

- Faster scan of an area
- Very fast and easy connection
- Very low insertion loss
- Capable of supporting unbalanced loads



AdvanSplitter-8 ™ : RFID power splitter, 8 ports

See: data sheet

AdvanSplitter-8 is a high performance eight port power splitter designed for RFID UHF applications.

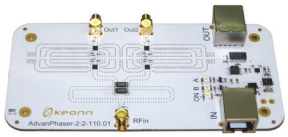
AdvanSplitter can be used to feed up to 8 antennas simultaneously, for instance, in order to scan an area much faster than using multiplexers.

Benefits:

- Faster scan of an area
- Very fast and easy connection
- Very low insertion loss
- Capable of supporting unbalanced loads

Your RFID building blocks

Phase shiffters



AdvanPhaser-2:4 ™ : RFID phase shifter

See: data sheet

AdvanPhaser-2:4 is a bi-directional phase shifter that splits a RF input into two outputs and can apply an electronically controlled change of phase between these two outputs in 90° steps.

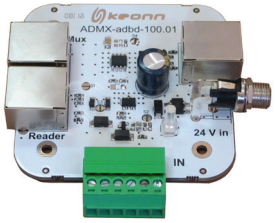
AdvanPhaser-2:4 can be used to control electronically the beam orientation of a directive antenna. This movement of the beam has many applications in RFID systems:

- Increase read-rate in RFID portals and loss prevention systems
- Obtain a very precise confinement of readings in an area
- Avoid detecting unwanted tags, by orienting the beam in a specific direction
- Avoid generating false alarms in loss prevention systems at retail stores

Benefits:

- Higher read-rate in critical RFID applications
- High confinement of readings in a specific zone
- Avoids detection of unwanted tags by orienting the antenna in another direction
- Easy change of phase by sending proper commands to the reader
- Compatible with most reader models
- Very fast and easy connection
- Low insertion loss

Connection boards



AdvanGPIO ™ : Connection board between Keonn products and RFID readers

See: data sheet

AdvanGPIO is a connection board that makes it very easy to control some Keonn products through the GPIO (General Purpose Input Output) of many RFID UHF reader models.

AdvanGPIO allows to connect AdvanMux-4 (four port RFID multiplexer), AdvanMux-8 (eight port RFID multiplexer), AdvanMux-12 (twelve port RFID multiplexer), AdvanMux-16 (sixteen port RFID multiplexer) and AdvanPhaser-2:4 (RFID phase shifter) to RFID readers of vendors like Impinj, Motorola, Sirit , Alien and ThingMagic.

Benefits:

- Very fast and easy connection
- Makes it very easy to control Keonn multiplexers and phase shifters by RFID readers
- Compatible with most reader models
- Wide input voltage range

AdvanGPIO-200™ : Connection board for connecting external devices to Keonn readers

See: data sheet

AdvanGPIO-200 is a connection board that facilitates connecting external devices to Keonn RFID readers. Such devices can be light/sounder devices such as tower LEDs and buzzers, and many industrial systems. The connection is done through the GPIO (General Purpose Input Output) of AdvanReader-60 and AdvanReader-150.
AdvanGPIO-200 allows to connect any device that works from 12 V to 24 V and that has a maximum consumption of 750 mA.

Benefits:

- Fast and easy connection
- Allows to control light/sounder devices with Keonn's readers
- Allows to connect industrial devices to Keonn's readers
- Compatible with most stack lights
- Wide input voltage range

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Your RFID building blocks

RFID Antennas

Advantenna-p11 : Non-directive RFID UHF antenna, ultrathin form factor

See: data sheet

Advantenna-p11 is a compact RFID UHF Antenna, with a very thin form factor, circular polarization and a gain of 3,2 dBi. Its radiation pattern is characterized by a wide beam in all directions on one hemisphere.

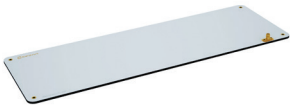
Applications: smart shelves, smart displays, smart panels and smart tables or other surfaces

Advantenna-p12 : RFID UHF antenna, ultrathin form factor

See: data sheet

Advantenna-p12 is a compact RFID UHF antenna, with a very thin form factor, circular polarization and a gain of 5.3 dBi. Its radiation pattern is characterized by a 89° beamwidth in the broadside direction and a 60° beamwidth in the endfire direction.

Applications: loss prevention gates and pedestals, hybrid EAS systems (acousto-magnetic + RFID)

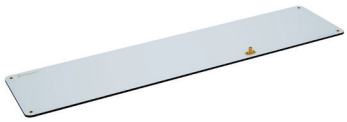


Advantenna-p13 : RFID UHF antenna, fan beam shape, ultrathin form factor

See: data sheet

Advantenna-p13 is a compact RFID UHF antenna with circular polarization and a gain of 6,8 dBi. Its radiation pattern is characterized by a 90° beamwidth in the broadside direction and a 40° beamwidth in the endfire direction (fan beam shape).

Applications: loss prevention systems, portals, corridors, doors

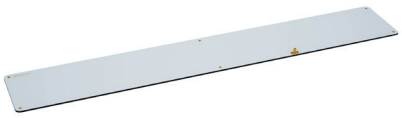


Advantenna-p14 : RFID UHF antenna, fan beam shape, ultrathin form factor

See: data sheet

Advantenna-p14 is a compact RFID UHF antenna with circular polarization and a gain of 8,0 dBi. Its radiation pattern is characterized by a 90° beamwidth in the broadside direction and a 30° beamwidth in the endfire direction (fan beam shape).

Applications: loss prevention systems, portals, corridors, doors

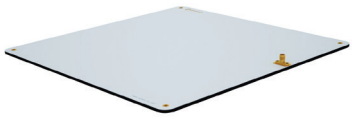


Advantenna-p16 : RFID UHF antenna, fan beam shape, ultrathin form factor

See: data sheet

Advantenna-p16 is a compact RFID UHF antenna with circular polarization and a gain of 9,3 dBi. Its radiation pattern is characterized by a 90° beamwidth in the broadside direction and a 20° beamwidth in the endfire direction (fan beam shape).

Applications: marathons and race timing, overhead loss prevention systems, portals, corridors, vehicle tracking

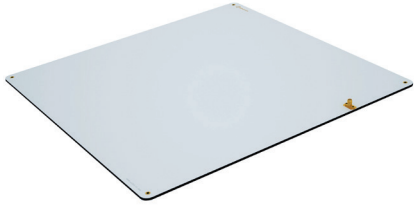


Advantenna-p22 : RFID UHF antenna, ultrathin form factor

See: data sheet

Advantenna-p22 is a compact RFID UHF antenna, with a very thin form factor, circular polarization and a gain of 6.6 dBi. Its radiation pattern is characterized by a 60° / 60° beamwidth.

Applications: point of sale systems, desktop readers with integrated antenna, overhead real-time inventory systems



Advantenna-p33 : RFID UHF antenna, pencil beam shape, ultrathin form factor

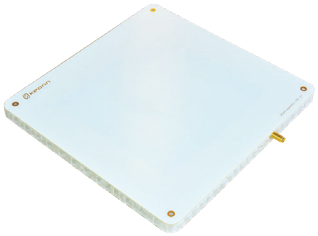
See: data sheet

Advantenna-p33 is a compact RFID UHF Antenna with circular polarization and a gain of 9,6 dBi. Its radiation pattern is characterized by a pencil beam shape (40° / 40°) .

Applications: overhead real-time inventory systems, fitting rooms, magic mirrors, doors

Your RFID building blocks

RFID Antennas



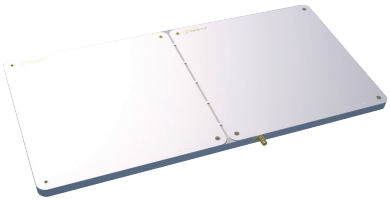
Advantenna-SP11 : High gain compact RFID UHF antenna

See: data sheet

Advantenna-SP11 is a compact RFID UHF Antenna with a very high gain, circular polarization and a radiation pattern characterized by a wide beam in all directions in one hemisphere.

The combination of a high gain, thin form factor and compact size (compared to other high gain antennas available on the market) make this antenna ideal for many RFID applications.

Applications: smart shelves, smart panels, smart tables, smart surfaces in general



Advantenna-SP11 : High gain RFID UHF antenna

See: data sheet

Advantenna-SP12 is an ultra-light RFID UHF Antenna with a very high gain, circular polarization and a radiation pattern characterized by a 70° beam width in one plane and a 40° beam in the other plane.

The combination of a high gain, thin form factor and ultra-light design make this antenna ideal for many RFID applications such as RFID portals, RFID tunnels, tracking systems, etc.

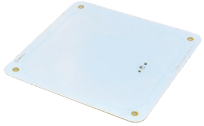
Applications: smart shelves, smart panels, smart tables, smart surfaces in general

Advantenna-CP11 : RFID UHF near-field antenna with highly controlled reading area, even with far field RFID tags

See: data sheet

Advantenna-CP11 is a compact RFID UHF Antenna, with a highly controlled reading area, and with circular polarization. By controlling the power of the RFID reader, the Advantenna-CP11 can work as a near-field antenna, or as a wider range antenna.

Applications: point of sales, smart panels, smart tables, smart surfaces in general



Advantenna-L11 : Near field RFID UHF antenna, ultrathin form factor

See: data sheet

Advantenna-L11 is a compact near-field RFID UHF Antenna, with a very thin form factor, and strong, even magnetic field distribution within its detection zone. When used with inductive near-field tags the reading area can be confined to the vicinity of the antenna

Applications: point of sales, smart panels, smart tables, smart surfaces in general

Your RFID building blocks

Holders for Keonn antennas

AdvanHolder is an antenna holder designed especially for Keonn antennas.

With its thin and easy to mount profile, AdvanHolder offers a new level of comfort in areas previously difficult to accommodate an antenna.

Holder for Advantenna-p11

See: data sheet

Holder for Advantenna-p12

See: data sheet

Holder for Advantenna-p13

See: data sheet

Holder for Advantenna-p14

See: data sheet

Holder for Advantenna-p16

See: data sheet

Holder for Advantenna-p22

See: data sheet

Holder for Advantenna-p33

See: data sheet

Accessories

RF cables

Type *	Available lengths (in feet)	Available lengths (in metres)
SMA male straight - SMA male straight	1 – 2 – 3 – 5 – 7 – 9 – 12 – 17 – 25	0,3 – 0,6 – 0,9 – 1,5 – 2,1 – 2,7 – 3,6 – 5,2 – 7,5
SMA male right angle - SMA male straight	1 – 3 – 5 – 7 – 9	0,3 – 0,9 – 1,5 – 2,1 – 2,7
SMA male right angle - SMA male right angle	1 – 3 – 5	0,3 – 0,9 – 1,5
SMA male straight - Reverse TNC male straight	1 – 3 – 5 – 7 – 9 – 12 – 17 – 25	0,3 – 0,9 – 1,5 – 2,1 – 2,7 – 3,6 – 5,2 – 7,5
SMA male right angle - Reverse TNC male straight	1 – 3 – 5 – 7 – 9	0,3 – 0,9 – 1,5 – 2,1 – 2,7
MCX male straight - SMA male straight	1 – 3 – 5 – 7 – 9	0,3 – 0,9 – 1,5 – 2,1 – 2,7
MCX male straight - SMA right angle	1 – 3 – 5 – 7 – 9	0,3 – 0,9 – 1,5 – 2,1 – 2,7
MCX male straight - MCX male straight	1 – 3 – 5 – 7 – 9	0,3 – 0,9 – 1,5 – 2,1 – 2,7
MCX male right angle - MCX male straight	1 – 3 – 5 – 7 – 9	0,3 – 0,9 – 1,5 – 2,1 – 2,7
MCX male straight - Reverse TNC male straight	1 – 3 – 5 – 7 – 9	0,3 – 0,9 – 1,5 – 2,1 – 2,7

** Other cable configurations can be supplied upon request*

RF adapters

Type	Mount type
SMA male straight to SMA male straight	Through
SMA female straight to SMA female straight	Through
SMA female straight to Reverse TNC male straight	Through
SMA female straight to Reverse TNC female straight	Through
N type male straight to SMA female straight	Through
MCX female straight to MCX female straight	Through
MCX female straight to MCX female straight	Bulk head
MCX female straight to Reverse TNC male straight	Through
MCX male straight to SMA female straight	Through
MCX female straight to SMA male straight	Through

Accessories

Standard style steel SMA torque wrench

Designed for use on SMA connectors, it has a torque of 0.9 Newtons meter (7.97 inch pounds) and an opening of 8mm (.315”).

Since the proper tightening torque ensures optimal performance over time, this break-over style torque wrench pivots when the torque setting is achieved, preventing over-torque conditions.

Ergonomic styling makes the handling of this 15 cm (5.9 inches) long torque wrench easy.

RF load

This 50-Ohm SMA RF load is designed to give the highest protection for the unconnected RF ports of your RFID devices. It can withstand a maximum power of 33 dBm (2 W).

AdvanPaint

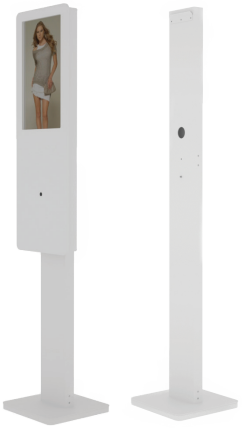
See: data sheet

AdvanPaint is a universal electro conductive base coating for shielding RFID UHF frequency electromagnetic fields. Based on hiqh quality pure acrylic binder, this paint is solvent free, frost resistant, brethable, low-odor and low-emission.

AdvanFilm

See: data sheet

AdvanFilm is a dry paint film functionalized with a special treatment for shielding RFID UHF frequency electromagnetic fields. It is a water-based acrylic dry paint film, complexed with a nonwoven fabric. This film is easy to install, odorless, does not need drying time, and prevents the apparition of cracks.



AdvanStand

See: data sheet

AdvanStand is a metallic stand for AdvanLook-21 and AdvanFitting.
It occupies very little space, and is very stable.

Options:

- Tube: Painted aluminium
- Base: Painted iron
- Colors: full RAL chart
- Default: RAL90 powder matt

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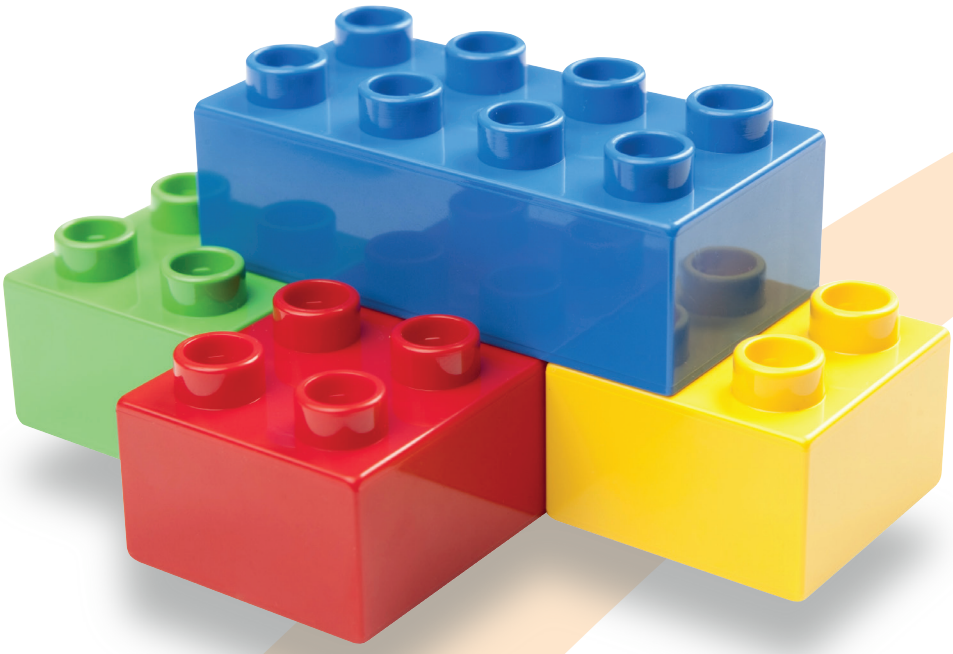

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