LeghornGroup
Protection - Control - Identification - Tracking
Since 1978

e-Seals

PROTECTION - CONTROL – IDENTIFICATION -TRACKING

CONTENTS

LeghornGroup

Electronic seals boost industry and logistic operations:

why?

"Electronic seals, often combined with the most innovative IT solutions, like data acquisition via mobile

and processing on-the-go, pave a new path towards higher security and efficiency in the various industry sectors and specifically in the whole logistic chain, enabling real time decision making and prompt contingency actions."

Luciano Grapsa
CEO and President - LeghornGroup
40 years in security systems

PROTECTION - CONTROL - IDENTIFICATION - TRACKING
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LeghornGroup

With the Internet of Things we are living a unique technological transition that will affect many aspects of our lives and will have huge implications for all industrial activities.

It is expected from the current 15 billion connected devices will increase up to around 50 billion by 2020 and, thanks to the advanced communication technologies, embedded sensors, to new and more powerful data analysis tools, companies will enjoy a visibility of unprecedented operations, allowing new sources of value.

The logistics and transport activities are ideal candidates to reap the maximum benefits from this increased visibility, in turn, transform the business models and decision-making, as well as operational processes of the personnel in the field: an impressive information content will be available in real time as to how the goods were stored, tracked, routed, maintained and delivered to customers.

LeghornGroup sides with industries and public bodies by providing all the necessary technologies and devices that enable this "revolution", rather than simply "evolution", of models, processes and practices of the logistics and transport operators.

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LeghornGroup vision and value

President's Statement

"The most important contribution that a company can offer to social progress is to manage its activities in the most efficient possible way. This means never losing sight of the values that are the foundation of any civil society. LeghornGroup has always been and continues to be engaged in activities that we believe are inseparable from our daily operations in the security sector, such as educational programs, donations and social commitment."

Luciano Grapsa – President and CEO
LeghornGroup s.r.l.

AIM

LeghornGroup's main aim is to operate efficiently, lucratively and responsibly in the security and anti-tampering sector.

LeghornGroup desires to be a focus point within this sector is supported by its strong commitment to manufacture and develop innovative and highly effective solutions.

RESPONSIBILITIES

LeghornGroup s.r.l. has five major areas of responsibility:

Towards its partners, protecting their investments and guaranteeing returns.

Towards its customers, taking care of existing clients, developing relations with new customers and maintaining their loyalty by offering a variety of products and good value services in terms of price, quality, safety and minimal environmental impact.

Towards its staff and employees, by respecting their rights and offering good working conditions, ensuring their full personal and professional satisfaction. Promote and make the most of their talent and ensure equal employment opportunity; encourage their staff's involvement in the planning and management of their work and the daily application of the corporate vision and values.

Towards all parties with whom the company establishes business relations. Ensure mutual benefits with contract partners and suppliers, and promote the application of these vision and values. The desire to promote these vision and values will be a determining factor in deciding whether to establish or maintain such relationships.

Towards the community. Conduct its business as responsible members of society, respecting the legislations where here LeghornGroup s.r.l. operates. Expressing its support for fundamental human rights, in line with its legitimate role of private enterprise, paying attention to the health, safety and the environment, whilst showing commitment to sustainable development.

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Who we are

LeghornGroup s.r.l. established 1978 is a manufacturer and supplier of security seals and security products for protecting assets.

Specializing in applications for shipping and logistics.

Thanks to a wealth of experience and it's in house design and production capabilities, LeghornGroup can provide a decisive and comprehensive response to every security related issue.

Its varied range of products, systems and bespoke solutions has allowed LeghornGroup to establish as one of the European leaders of this sector. With sales offices in Europe, USA Latin American and the Middle East with production plants for plastic molding and metal parts, LeghornGroup has complete control over its range of products and an extensive worldwide client support network.

Furthermore, the company's computer and electronics division within the group have been working for over ten years to enhance LeghornGroup' security products with the most innovative technical features. Their aim: to protect our assets, data and information and make a better future for all of us.

LeghornGroup is committed to protecting goods and assets from tampering or pilferage, by using the most suitable solution (be it mechanical, electronic or a combination) providing not only maximum security but guaranteeing economic efficiency.

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Who we are

To achieve this goal LeghornGroup delivers:

Protection. LeghornGroup can protect your goods and assets with security seals and various products for tamper protection. The company can create bespoke, technical solutions to meet client's requirements.

Control. LeghornGroup ensures goods and people can be monitored using security products and integrated complete hardware and software solutions that allow the operator to monitor and intervene in real time, even remotely.

Identification. LeghornGroup's understanding of authentication along with their innovative technical products and solutions allow users to uniquely and securely identify, goods, vehicles, containers, animals and people.

Tracking. LeghornGroup's real time GPS tracking devices allow users to monitor location, status and movements of vehicles and people.

LeghornGroup also manufactures:
• Solutions for product authenticity;
• Automatic identification systems using RFID to aid traceability of objects, animals and people, offering new and efficient operations to speed up the supply chain;

LeghornGroup aim is to be strongly customer focused, and provide a specific solution that completely meets their needs, which may differ from one client to the next. By working closely alongside clients, they are able to experience firsthand their problem and solve it together.

On a daily basis the company not only works to broaden their understanding of some of the many issues related to illegal and criminal activities, but also the means to counteract them. LeghornGroup s.r.l. keeps a detailed data base on their various products in order to assist the police force with their fight against crime.
Furthermore, LeghornGroup provides an active online service to anybody who might need advice or is looking for a specific product within this sector.

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NEPTUNE UHF RFID LOGISTIC SEAL

High Security Seal with RFID,
radiofrequency automatic identification capability

NEPTUNE UHF RFID LOGISTIC SEAL

ISO17712:2013 High Security Seal for containers.

RFID provides automatic identification of the container.

It can be read quickly and accurately by static gateway reading systems or by handheld devices operated by check point personnel.

The RFID chip can also be used to store further information. The chip can be easily written by using RFID reader/writer device.

Further information added and the chip itself can be password protected.

RFID e-seal with univocal serial number

Can be **automatically detected when trucks/containers are on-the-go** at gateways, by using RFID gates: this makes gate in/gate out **operations faster and more reliable and secure** (human error free).

Seal **available also in tamper evidence version**: the status of the seal (TAMPERED / NOT TAMPERED) is immediately detected and read at time of passing through gate or by manual inspection.

LeghornGroup **NEPTUNE UHF RFID LOGISTIC SEAL** is a sturdy container bolt seal that combines high mechanical security as required by **ISO17712:2013** technical standard with the electronic security offered by RFID, automatic radio frequency identification technology.

The outer **polypropylene plastic housing** of the seal – customizable with mark and numbering on request - **embeds an unique electronic chip**, that has its own univocal coding, which cannot be replicated. This allows for secure and reliable automatic identification of the seal applied to the container.

NEPTUNE UHF RFID LOGISTIC SEAL, has read-only univocal ID; additional user memory is available for the storage of customer-specific information.

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NEPTUNE UHF RFID LOGISTIC SEAL

Radio Frequency specification

- Frequency: 860 – 960 MHz – UHF EPC Global
- Reference RF Standard: ISO/IEC 18000-6
- RF Protocol: EPC Class 1 Gen2 / ISO/IEC 18000-6C
- Technology: Passive
- Integrated circuit: NXP G2iM+
- User read / write memory: yes - up to 640 bit
- Memory size: from 128 bit up to 448 bit of EPC Memory
- TID (Tag IDentifier): 96 bit, including 48-bit factory locked
- Unique serial number: 112 bit User TID memory
- Password protection: yes
- Tamper Detection: yes
- Read / write cycle: 10000
- Data retention: 20 year

Performance

- Reading distance by handheld reader: 3 m (118" 7⁄64") (depending on reader)
- Reading distance at gate reader: 8 m (314" 61⁄64") (depending on reader)
- Quality: 100% performance tested

Mechanical specification

- IP Protection IP66
- Operative Temperature - 20°C/ +55°C
- Storage Temperature - 30°C / +80°C
- ISO 17712:20\3: yes
- Size Electronic Part (flag): mm 42 x 115 x 4 (1" 21⁄32" x 4" 17⁄32" x 5⁄32")
- Metallic pin diameter: 8 mm (5⁄16")
- Metallic pin length: 73.5 mm (2" 29⁄32")
- Bolt diameter: 20 mm (55⁄64")
- Weight: 70 g
- Material: carbonitrured steel + polypropylene in accordance with Restriction of Hazardous Substances (RoHS), European Directive 2002/EC.

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NEPTUNE UHF RFID TAMPER EVIDENT SEAL

High Security Seal with RFID,
radiofrequency automatic identification capability

NEPTUNE UHF RFID TAMPER EVIDENCE SEAL

ISO17712:2013 High Security Seal for containers.

RFID provides automatic identification of the container. It can be read quickly and accurately by static gateway reading systems or by handheld devices operated by check point personnel.

The RFID chip can also be used to store further information. The chip can be easily written by using RFID reader/writer device. Further information added and the chip itself can be password protected.

Specifically for the tamper evidence version:
Any tampering event to the seal is permanently stored in its chip's memory.

This activates the TAG TAMPER ALARM, which immediately provides the status of the seal either TAMPERED or NOT TAMPERED.

RFID e-seal with univocal serial number
Can be **automatically detected when trucks/containers are on-the-go** at gateways, by using RFID gates: this makes gate in/gate out **operations faster and more reliable and secure** (human error free).

Seal **available in tamper evidence version**: the status of the seal (TAMPERED / NOT TAMPERED) is immediately detected and read at time of passing through gate or by manual inspection.

NEPTUNESEAL UHF RFID TAMPER EVIDENCE SEAL is a sturdy container bolt seal that combines high mechanical security as required by **ISO17712:2013** technical standard with the electronic security offered by RFID, automatic radio frequency identification technology.

The outer **polypropylene plastic housing** of the seal – customizable with mark and numbering on request - **embeds an unique electronic chip**, that has its own univocal coding, which cannot be replicated. This allows for secure and reliable automatic identification of the seal applied to the container.

NEPTUNE UHF RFID TAMPER EVIDENCE SEAL has univocal ID code and read/write User Memory capabilities. It offers at the same time the immediate and accurate seal identification and the status of the seal i.e. evidence of tamper occurred, if any. It is an ideal solution for guaranteeing cargo security and tamper evidence along the shipping and supply chain.

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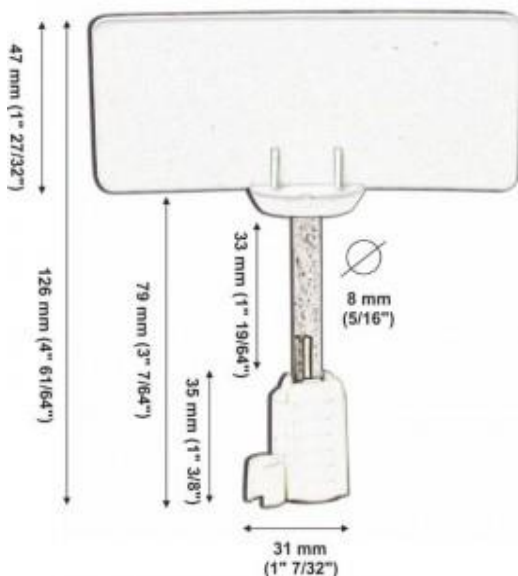# NEPTUNE UHF RFID TAMPER EVIDENT SEAL

Radio Frequency specification

- Frequency: 860 – 960 MHz – UHF EPC Global
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- Unique serial number: 112 bit User TID memory
- Password protection: yes
- Tamper Detection: yes
- Read / write cycle: 10000
- Data retention: 20 year

Performance

- Reading distance by handheld reader: 3 m (118" 7⁄64") (depending on reader)
- Reading distance at gate reader: 8 m (314" 61⁄64") (depending on reader)
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Mechanical specification

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CABLE UHF RFID LOGISTIC SEAL

Metal Cable Security Seal with RFID, radiofrequency automatic identification capability

CABLE UHF RFID LOGISTIC SEAL

Security Seal for trucks, trailers, containers.

RFID provides automatic identification of the vehicle and/or container.

It can be read quickly and accurately by static gateway reading systems or by handheld devices operated by check point personnel.

The RFID chip can also be used to store further information. The chip can be easily written by using RFID reader/writer device.

Further information added and the chip itself can be password protected.

RFID e-seal with univocal serial number

Can be **automatically detected when trucks/trailers/containers are on-the-go** at gateways, by using RFID gates: this makes gate in/gate out **operations faster and more reliable and secure** (human error free).

LeghornGroup **CABLE UHF RFID LOGISTIC SEAL** is a sturdy cable seal that combines mechanical security of standard seals with the electronic security offered by RFID, automatic radio frequency identification technology.

The outer shock-proof **polystyrene plastic housing** of the seal – customizable with mark and numbering on request - **embeds an unique electronic chip**, that has its own univocal coding, which cannot be replicated. This allows for secure and reliable automatic identification of the seal applied to the vehicle or container.

CABLE UHF RFID LOGISTIC SEAL has read-only univocal ID; additional user memory is available for the storage of customer-specific information.

The cable lock system makes its use easy in a variety of different applications.

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CABLE UHF RFID LOGISTIC SEAL

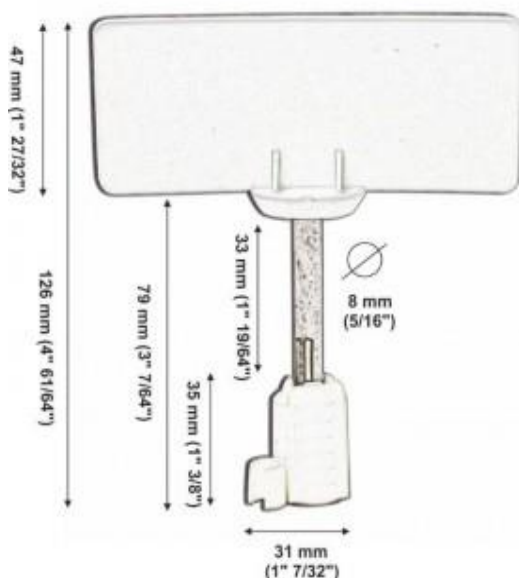## Radio Frequency specification

- Frequency: 860 – 960 MHz – UHF EPC Global
- Reference RF Standard: ISO/IEC 18000-6
- RF Protocol: EPC Class 1 Gen2 / ISO/IEC 18000-6C
- Technology: Passive
- Integrated circuit: NXP G2iM+
- User read / write memory: yes - up to 640 bit
- Memory size :   from 128 bit up to 448 bit of EPC Memory
- TID (Tag IDentifier):   96 bit, including 48-bit factory locked
- Unique serial number;   112 bit User TID memory
- Password protection: yes
- Tamper Detection: yes
- Read / write cycle: 10000
- Data retention: 20 year

Performance

- Reading distance by handheld reader: 3 m (118" 7⁄64") (depending on reader)
- Reading distance at gate reader: 8 m (314" 61⁄64") (depending on reader)
- Quality: 100% performance tested

Mechanical specification

- IP Protection IP66
- Operative Temperature   - 20°C/ +55°C
- Storage Temperature   - 30°C / +80°C
- ISO 17712:20\3:   yes
- Size Electronic Part (flag): mm 42 x 115 x 4 (1" 21⁄32" x 4" 17⁄32" x 5⁄32")
- Wire standard length   350 mm (1"21/64")
- Wire diameter   3,5 mm (9/64")
- Weight: 61 g
- Material: carbonitrured steel + shock-proof polystyrene in accordance with Restriction of Hazardous Substances (RoHS), European Directive 2002/EC

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CABLE UHF RFID TAMPER EVIDENT SEAL

Metal Cable Security Seal with RFID,
radiofrequency automatic identification capability

RFID CABLE SEAL

Security Seal for trucks, trailers, containers.

RFID provides automatic identification of the vehicle and/or container.

It can be read quickly and accurately by static gateway reading systems or by handheld devices operated by check point personnel.

The RFID chip can also be used to store further information. The chip can be easily written by using RFID reader/writer device.

Further information added and the chip itself can be password protected.

Specifically for the tamper evidence version:

Any tampering event to the seal is permanently stored in its chip's memory. This activates the TAG TAMPER ALARM, which immediately provides the status of the seal either TAMPERED or NOT TAMPERED.

RFID e-seal with univocal serial number

Can be **automatically detected when trucks/trailers/containers are on-the-go** at gateways, by using RFID gates: this makes gate in/gate out **operations faster and more reliable and secure** (human error free).
° Seal **available in tamper evidence version**: the status of the seal (TAMPERED / NOT TAMPERED) is immediately detected and read at time of passing through gate or by manual inspection.

LeghornGroup **CABLE UHF RFID TAMPER EVIDENCE SEAL** is a sturdy cable seal that combines mechanical security of standard seals with the electronic security offered by RFID, automatic radio frequency identification technology.

The outer shock-proof **polystyrene plastic housing** of the seal – customizable with mark and numbering on request - **embeds an unique electronic chip**, that has its own univocal coding, which cannot be replicated. This allows for secure and reliable automatic identification of the seal applied to the vehicle or container.

CABLE UHF RFID TAMPER EVIDENCE SEAL has univocal ID code and read/write User Memory capabilities. It offers at the same time the immediate and accurate seal
It is an ideal solution for guaranteeing cargo security and tamper evidence along the shipping and supply chain.
The cable lock system makes its use easy in a variety of different applications.

CABLE UHF RFID TAMPER EVIDENT SEAL
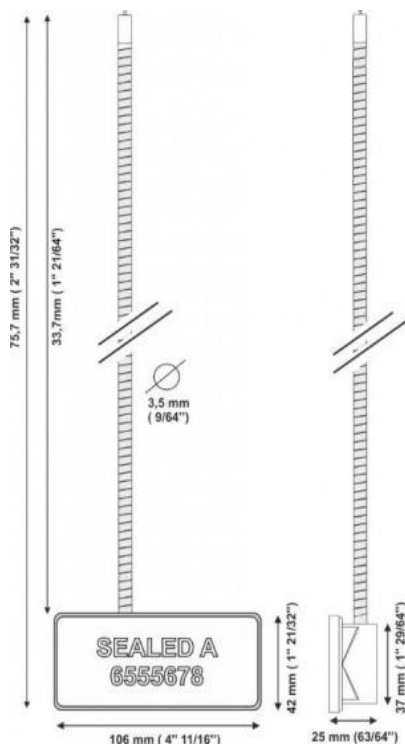
Radio Frequency specification

- Frequency: 860 – 960 MHz – UHF EPC Global
- Reference RF Standard: ISO/IEC 18000-6
- RF Protocol: EPC Class 1 Gen2 / ISO/IEC 18000-6C
- Technology: Passive
- Integrated circuit: NXP G2iM+
- User read / write memory: yes - up to 640 bit
- Memory size: from 128 bit up to 448 bit of EPC Memory
- TID (Tag IDentifier):   96 bit, including 48-bit factory locked
- Unique serial number: 112 bit User TID memory
- Password protection: yes
- Tamper Detection: yes
- Read / write cycle: 10000
- Data retention: 20 year

Performance

- Reading distance by handheld reader: 3 m (118" 7⁄64") (depending on reader)
- Reading distance at gate reader: 8 m (314" 61⁄64") (depending on reader)
- Quality: 100% performance tested

Mechanical specification

- IP Protection IP66
- Operative Temperature   - 20°C/ +55°C
- Storage Temperature   - 30°C / +80°C
- ISO 17712:20\3:   yes
- Size Electronic Part (flag): mm 42 x 115 x 4 (1" 21⁄32" x 4" 17⁄32" x 5⁄32")
- Wire standard length   350 mm (1"21/64")
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TITANSEAL UHF RFID LOGISTIC SEAL

Plastic pull-tight seal with RFID,
radiofrequency automatic identification capability.

TITAN UHF RFID SEAL

Plastic adjustable seal for sacks, but also trucks, trailers, containers.

RFID provides automatic identification of the item to which the seal is applied.

It can be read quickly and accurately by static gateway reading systems or by handheld devices operated by check point personnel.

The RFID chip can also be used to store further information. The chip can be easily written by using RFID reader/writer device.

LEGHORNGROUP **RFID TITAN SEAL** (available in operational frequency bands **HF or UHF**) is an **adjustable plastic security seal**.
The added **RFID electronic component** turns it into a product that can store a lot of information for logistics and traceability purposes.
Tear-off possibility or standard version.

The **polypropylene plastic housing** of the seal – highly resistant in harsh environments and customizable with mark and numbering on request – **embeds an unique electronic chip**, that has its own coding, which cannot be replicated. This allows for secure and reliable automatic identification of the seal.

This product is ideal for closing large sacks and bags and track logistics of goods, but also to seal truck locks or tanker inlets-outlets.

RFID e-seal with unique serial number

Can be **automatically detected when goods or vehicles (trucks /trailers /containers) are on-the-go** at gateways, by using RFID gates: this makes gate in/gate out **operations faster and more reliable and secure** (human error free).

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TITANSEAL UHF RFID LOGISTIC SEAL
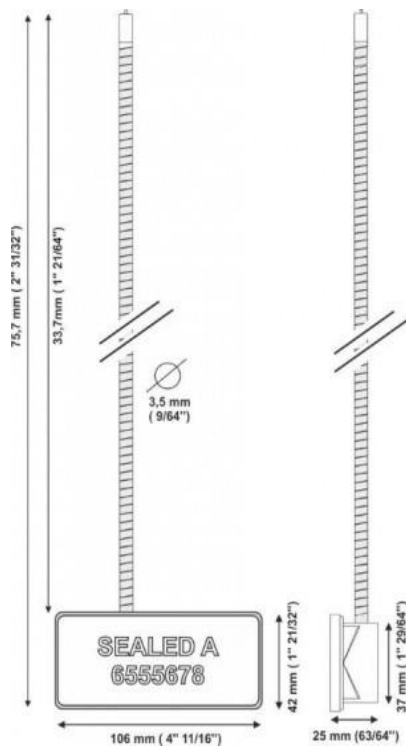
Radio Frequency specification
UHF Model

- Frequency: 860 – 960 MHz – UHF EPC Global
- Reference RF Standard: ISO/IEC 18000-6
- RF Protocol: EPC global and   ISO 18000-63 compliant, Gen2V2 compliant
- Technology: Passive
- Integrated circuit: IMPINJ Monza 5 Read/Write
- User read / write memory: yes - 32 bit
- Memory size: up to 128 bits of EPC memory
- TID (Tag IDentifier):   48 bits of serialized TID
- Password protection: yes
- Tamper Detection: no
- Read / write cycle: 100.000
- Data retention: 50 year

HF Model

- Operating frequency: 13.56 MHz – HF
- Reference RF Standard: ISO/IEC 15693
- Technology: Passive
- Integrated circuit: ICode SLI series
- Memory size: up to 2048 bit; Read/Write
- UID (Unique IDentifier):   64 bits
- Tag dimension: 60×60 mm (2" 23⁄64" x 2" 23⁄64")
- Password protection: yes
- Tamper Detection: no
- Read / write cycle: 10,000
- Data retention: 10 years

Performance

- UHF - Reading distance by handheld reader: 50 – 80 cm (19" 11⁄16" – 31" 1⁄2")
- HF - Reading distance by handheld reader: 10 – 30 cm (3" 15⁄16" – 11" 13⁄16")
- Quality: 100% performance tested

TITANSEAL UHF RFID LOGISTIC SEAL

Mechanical specification
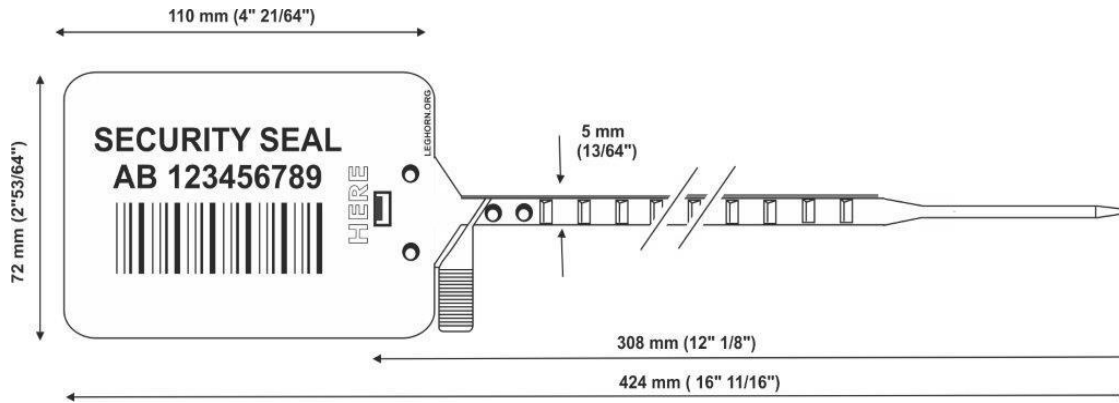
Mechanical specification

- IP Protection: IP66
- Operative Temperature: – 20°C / + 80 °C
- Storage Temperature: – 20°C / + 80 °C

- Size Electronic Part (flag):   72 x 110 (2" 53/64" x 4" 21⁄64") mm
- Total length: 424 mm 337 (16" 11⁄16")
- Working length: 308 (12" 1⁄8") mm
- Weight: 11 g

- Material: co-polymer polypropylene plastic housing.
                                     PET RFID label with adhesive for special use.

Marking options

- Ink transfer printing
- Laser etching marking
- 15 digits sequential numbering
- Barcoding
- Up to 20 alphanumeric characters per line
- Customer's logo
- Special customisation on quantities with embossed logo

RFID TWISTSEAL: WIRE SEAL
Self locking seal

RFID Twistseal is a security seal made of very strong plastic material. The completely transparent outer casing allows to check the correct locking system.

It is equipped with RFID UHF inlay, compatible with ISO18000-6 and has a unique code which is impossible to clone (available also in HF/NFC operating frequency) since it is embedded in the seal.

HOW TO USE IT:
Insert the cable in one of the two holes on the body of the seal, paying attention to insert the same cable in the corresponding hole in the inner plastic cylinder.
To close it, turn the handle of the seal 360°. Once closed, it is advisable to snap off the handle. It is impossible to tamper the seal once it is secured.

SEQUENTIAL NUMBERING AND CUSTOMISATION:
- LASER PRINT
- Sequenced numbering up to 15 digits.
- Customised up to 20 characters on one line
- Logo available upon request
- Same EPC code than the outer laser marking

Available in different RFID operating frequency

AVAILABLE COLOURS:
Red – Yellow – Blue – Green – White – Black – Orange – Light blue – Grey – Brown – Lilac – Silver - Gold

PACKING:
- Quantity per carton 500 seals
- Carton size: 56x24x46 H cm
- Carton weight: 3/4 kgs
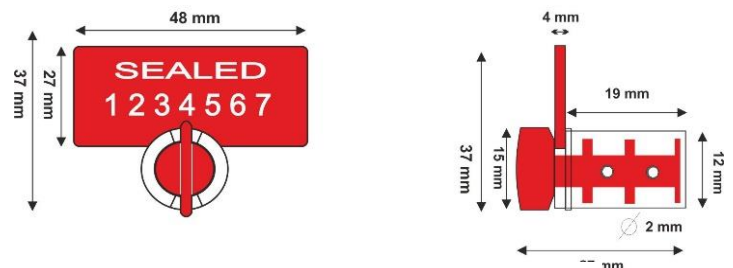
RFID UHF TWISTSEAL

Protocol	EPC Class 1 Gen2
ISO/IEC 18000-6C	
Chip	ALIEN 9620
Memory	EEPROM
Operating frequency	860 – 960 MHz - UHF
Global	
Protection	IP65
Operating temperature	-20°C a +80°C
Storage temperature	-20°C a +80°C
Tag size	mm 15x30
Resistance to critical external agents	
Typical reading range: from 5 to 15 cm	
(depending on the type of reader used)	

Available also in the following versions: RFID HF ISO 15693, HF ISO 14443A MIFARE, HF NFC NTAG

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ANCHORFLAG UHF RFID LOGISTIC SEAL
Sealing wire plastic seal with RFID, radiofrequency automatic identification capability

UHF RFID ANCHORFLAG is a wire security plastic seal with UHF RFID TAG.
Completely transparent plastic seal. The transparent plastic permits the integrity control of the locking mechanism.
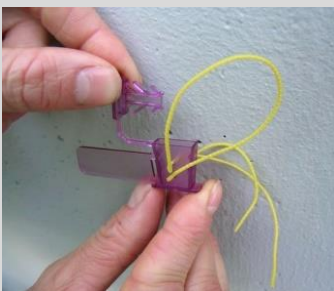
UHF RFID ANCHORFLAG

The RFID technology provides automatic, contactless and without line of sight identification of the seal associated with the meter.
It can be read quickly and accurately through portable devices operated by the staff.
The RFID chip can also be used to store additional information.
One can easily write into the chip by using standard RFID read / write devices. The information can be password protected.

UHF RFID ANCHORFLAG mounts an RFID tag whose electronic chip has its own unique coding system and cannot be cloned. This feature enables a safe and reliable automatic identification of the seal, i.e. the item associated with it.

Specification

- Operating frequency 860-960 MHz - UHF Global
- Protocol EPC Class 1 Gen2 - ISO / IEC 18000-6C
- Chip ALIEN H3
- EEPROM memory
- IP66 Protection
- Operating temperature -20 ° C to + 80 ° C
- Storage temperature -20 ° C to + 80 ° C
- Tag size 12x30 mm
- Resistance to critical external agents
- Typical reading range: from 5 to 15 cm
  (depending on the type of reader used)

How to use it
Plug the wire into the holes of the seal body.
Press the anchor tip into the corresponding hole.
Press with your fingers till the seal locks. A shutter sound ensures the closing of the seal

The outer casing of the seal, made of resistant polycarbonate can be customized with marking and numbering (alphanumeric code, laser engraving, or in quantity also embossed lettering).

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ANCHORFLAG HF/NFC RFID LOGISTIC SEAL

Sealing wire plastic seal with RFID,
radiofrequency automatic identification capability

HF/NFC RFID ANCHORFLAG is a wire security plastic seal with HF or NFC, Near Field Communication RFID TAG.
Completely transparent plastic seal. The transparent plastic permits the integrity control of the locking mechanism.

UF or NFC RFID ANCHORFLAG

The RFID technology provides automatic, contactless and without line of sight identification of the seal associated with the meter.
It can be read quickly and accurately through portable devices operated by the staff.
The RFID chip can also be used to store additional information.
One can easily write into the chip by using standard RFID read / write devices. The information can be password protected.

HF/NFC RFID ANCHORFLAG mounts an RFID tag whose electronic chip has its own unique coding system and cannot be cloned.
This feature enables a safe and reliable automatic identification of the seal, i.e. the item associated with it.

Specification

- Operating frequency 13.56 MHz
- Protocol ISO 15693, HF ISO 14443A MIFARE, HF NFC NTAG.
- EEPROM memory
- IP66 Protection
- Operating temperature -20 ° C to + 80 ° C
- Storage temperature -20 ° C to + 80 ° C
- Tag size 12x30 mm
- Resistance to critical external agents
- Typical reading range: from 1 to 3 cm

(depending on the type of reader used)

How to use it
Plug the wire into the holes of the seal body. Press the anchor tip into the corresponding hole.
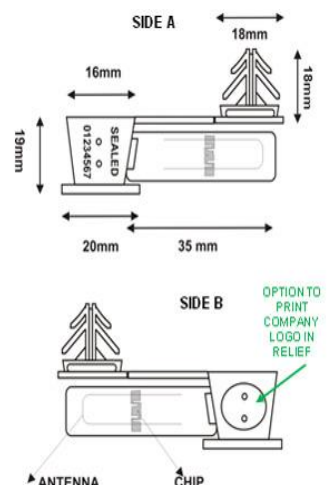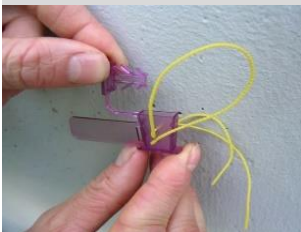Press with your fingers till the seal locks. A shutter sound ensures the closing of the seal

The outer casing of the seal, made of resistant polycarbonate can be customized with marking and numbering (alphanumeric code, laser engraving, or in quantity also embossed lettering).

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ADJUSTSEAL UHF/NFC RFID

27 mm (1" 1/16")

67 mm (2"5/8")

9 mm (11/32")

SECURITY SEAL
AB 123456789

3,3x265 mm (1/8" x 10" 27/64) - 3,3x374 mm (1/8" x 1' 2" 23/32")

3,3mm (1/8")

SEALED B 1222846

SEALED B 1222857
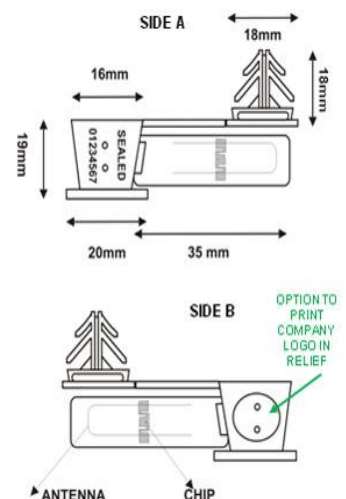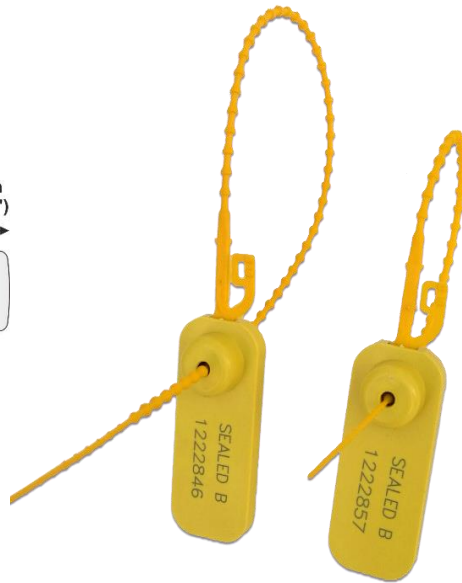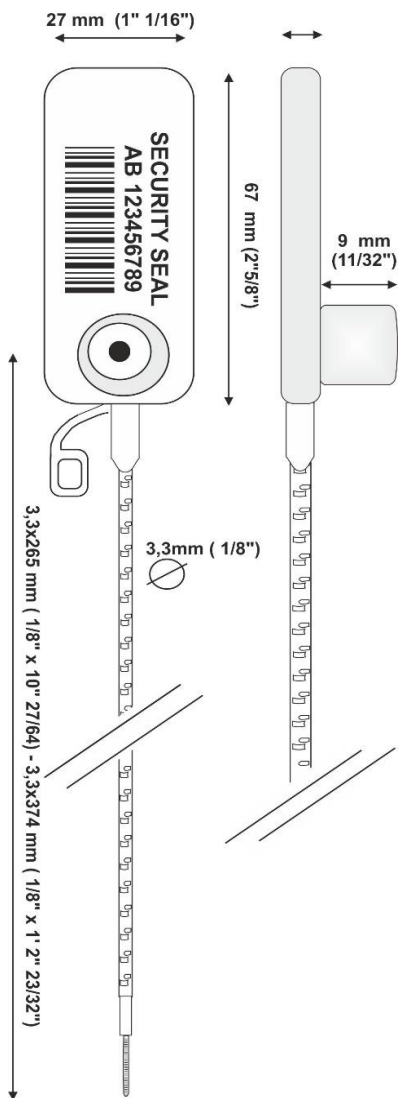
Adjustable plastic seal for fast and safe application.

This seal integrates an RFID inlay operating either in the NFC HF band, *Near Field Communication* or UHF band, with an electronic chip with a unique ID code.

The presence of the chip ensures the possibility of carrying out fast and reliable operations to identify the object to which the seal is applied (contactless and in the absence of line of sight).

Additional information can also be stored into the chip user memory, which can be accessed by simply placing any NFC smartphone or tablet in proximity of the seal or by using UHF mobile/fixed readers.

TECHNICAL SPECIFICATIONS

- Operative frequency   13.56MHz - Protocol: ISO 14443A
- RFID inlay type: HF Smart Label
- RFID Chip: Ntag203, Ntag213
- Reading Range HF/NFC: approx 3 cm

- Operative frequency: 860-960 MHz - Protocol: ISO 18000-6
- RFID inlay type: UHF Smart Label
- RFID Chip: Impinj Monza 6/Alien H3
- Reading Range UHF: approx 10 cm

- Warranty: 1 year
- Plastic tag size: 30 mm * 15 mm,
- Seal tail: Dia.   3.3 mm, Length 265/374mm
- Material: Polypropylene
- Printing (option):   Laser mark
- Barcode (option):   Barcode printing

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JUPITERSEAL UHF/NFC RFID

Resistant and versatile indicative seal, available in five different tail lengths and three different diameter size, which make this seal suitable for plenty of applications, from transport, to safety, to industry or postal services.

This adjustable plastic seal. for fast and safe application, integrates a locking mechanism with metal locking to increase the level of protection against tampering attempts.

Also, it includes an electronic chip for univocal identification of the object to which the seal is applied (contactless and in the absence of line of sight).

Additional information can also be stored into the chip user memory, which can be accessed by simply placing any NFC smartphone or tablet in proximity of the seal.
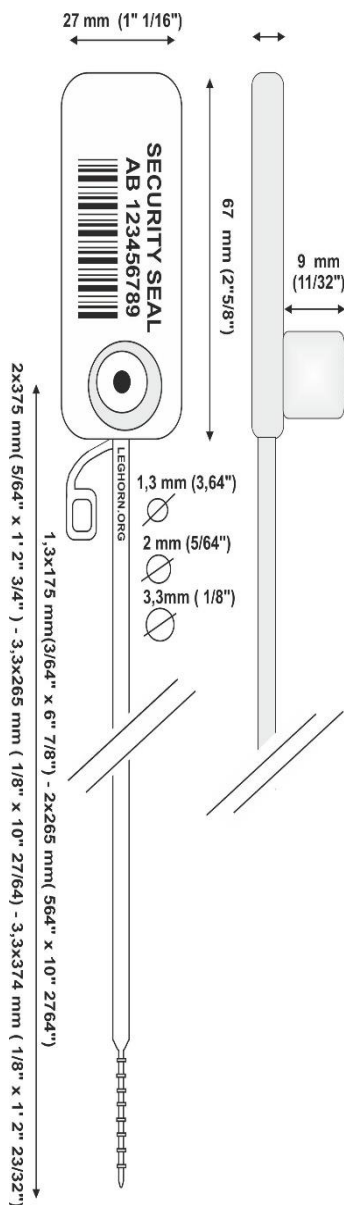
TECHNICAL SPECIFICATIONS

- Operative frequency   13.56MHz - Protocol: ISO 14443A
- RFID inlay type: HF Smart Label
- RFID Chip: Ntag203, Ntag213
- Reading Range HF/NFC: approx 3 cm

- Operative frequency: 860-960 MHz - Protocol: ISO 18000-6
- RFID inlay type: UHF Smart Label
- RFID Chip: Impinj Monza 6/Alien H3
- Reading Range UHF: approx 10 cm

- Warranty: 1 year
- Plastic tag size: 67 mm * 27 mm
- Seal tail: Dia. 1.3/2.0/3.3 mm,
                               Length: 175/265/374 mm
- Material: Polypropylene
- Printing (option):   Laser mark
- Barcode (option):   Barcode printing

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HECTORSEAL UHF/HF RFID

32 mm (1" 1/4")   11 mm(27/64")

SAMPLE 00000056

76 m (2" 63/64")

356 mm (1' 2" 1/64")

HECTORSEAL RFID is an adjustable plastic seal that combines the mechanical characteristic of high tensile strength, typical of this model, with the security and greater versatility of use offered by the automatic radio frequency identification technology, RFID.

The seal has a special closing system with metal insert which strengthens its handling resistance. It can also be made with and without pre-cut.

HECTORSEAL 7,5 × 420 mm meets a wide range of applications: it can be used to seal tank trucks, to close holes far from each other, or for heavy postal bags.

The presence of a unique RFID chip guarantees its complete non-clonability, reinforcing product security in the authentication of goods along the transport and logistics chain.

The availability of the product in two different operating frequency bands also ensures differentiated performances and therefore a wider possibility of use in the field.

The transparent housing covering the plastic head not only seals and makes the RF part inaccessible, but also allows a quick visual inspection and the reading at glance of any marking data printed in clear on the head itself.
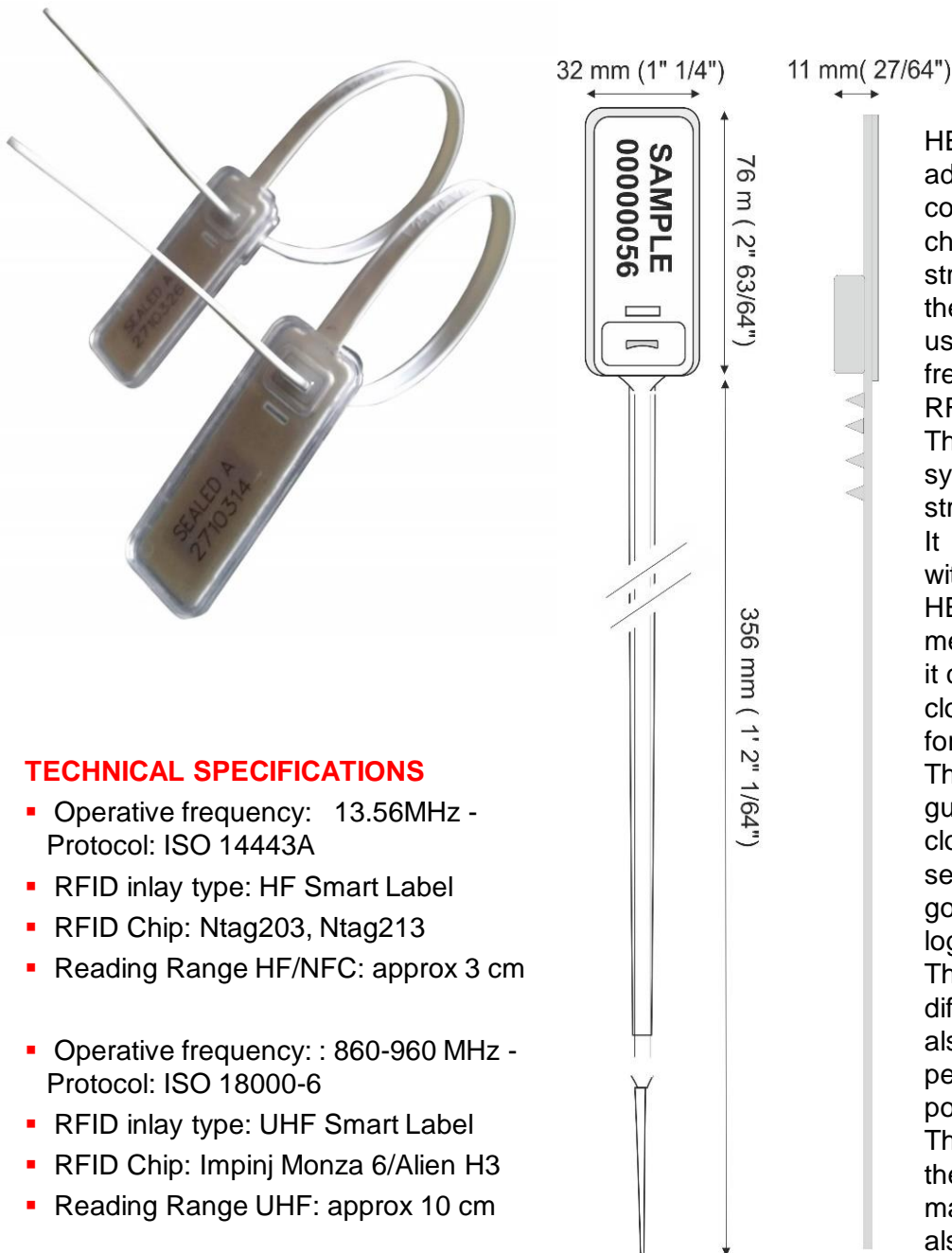
TECHNICAL SPECIFICATIONS

- Operative frequency: 13.56MHz - Protocol: ISO 14443A
- RFID inlay type: HF Smart Label
- RFID Chip: Ntag203, Ntag213
- Reading Range HF/NFC: approx 3 cm

- Operative frequency: : 860-960 MHz - Protocol: ISO 18000-6
- RFID inlay type: UHF Smart Label
- RFID Chip: Impinj Monza 6/Alien H3
- Reading Range UHF: approx 10 cm

- Plastic tag size: 75 mm * 28 mm, Seal tail: Width 7.5 mm, Length 420 mm
- Material: Polypropylene
- Printing (option): Laser Mark
- Barcode (option): Barcode printing
- Operative Temperature: -20℃ ~ 55℃
- Warranty: 1 year

MINICABLE RFID – UHF/HF

42 mm (1" 41/64") • 25 mm (31/32")

46 mm (1" 51/64")

SEALED
01234567

46 mm (1" 51/64")

3,5 mm (9/64")

200 mm (7" 7/8")

RFID Sample 01234588

NFC Sample 01234567

MINICABLE RFID is a metal adjustable cable-lock seal offering a high level of security thanks to it mechanical characteristics combined with the use of automatic radio frequency identification technology, RFID.

The presence of a unique RFID chip guarantees its complete non-clonability, reinforcing product security in the authentication of goods and their physical protection along the transport and logistics chain.

The availability of the product in two different operating frequency bands also ensures differentiated performances and therefore a wider possibility of use in the field. In particular, NFC product version makes it user friendly, with information accessible simply via smartphone or tablet.

MINICABLE RFID product is also available in a fixed-length option that allows using this security seal as special security key-holder

TECHNICAL SPECIFICATIONS

- Operative frequency   13.56MHz - Protocol: ISO 14443A
- RFID inlay type: HF Smart Label
- RFID Chip: Ntag203, Ntag213
- Reading Range HF/NFC: approx 3 cm

- Operative frequency: 860-960 MHz - Protocol: ISO 18000-6
- RFID inlay type: UHF Smart Label
- RFID Chip: Impinj Monza 6/Alien H3
- Reading Range UHF: approx 10 cm

- Plastic box size: 42 mm*46 mm*25 mm, Cable: Diameter 3.5 mm, Length 200 mm

- Material: carbonitrured steel + shock-proof polystyrene in accordance with Restriction of Hazardous Substances (RoHS), European Directive 2002/EC

- Marking (option): Laser engraving for alphanumeric string, logo, barcode

- Operative Temperature: -20℃ ~ 55℃

- Warranty: 1 year

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CONNECTIONLOCK UHF- HF/NFC RFID

Logistic valve meter cover

RFID HF / NFC OR RFID UHF SEAL FOR ENERGY METERS

The RFID technology provides automatic, contactless and without line of sight identification of the seal associated with the meter.

It can be read quickly and accurately through portable devices operated by the staff.

The RFID chip can also be used to store additional information.

One can easily write into the chip by using standard RFID read / write devices. The information can be password protected.

Tampering prevention security and operating data available in one single solution, with the new RFID seal for meters.

RFID CONNECTION LOCK is an e-seal specifically designed by LEGHORNGROUP for energy meters that combines the mechanical safety with the electronic one offered by RFID, radio frequency automatic identification technology.

RFID CONNECTION LOCK is a protection system for fittings of water and gas supply, simple to apply, which operates as a seal; it is composed of two semi-circular parts which fit together in a permanent way - one inside the other - and that cannot be separated without prior split them. The transparent plastic material with which the seal is realized allows to check the correct closure of the valve.

The presence of an integrated RFID tag - available in the frequency band HF (NFC) and UHF, not accessible from outside, allows associating a unique serial number with the closure system CONNECTION LOCK, number that can be read remotely and without line of sight with the operator.
With this identifier, the meter is automatically identified, by using RFID handheld readers or even smartphones and tablet from the market, assuming use of NFC technology

RFID CONNECTION LOCK mounts an RFID tag whose electronic chip has its own unique coding system and cannot be cloned. This feature enables a safe and reliable automatic identification of the seal, or meter / user associated with it.

The outer casing of the seal, made of high-impact resistant polycarbonate can be customized with marking and numbering (alphanumeric code with inkjet printing technique, laser engraving, or in quantity also embossed lettering).

CONNECTIONLOCK UHF-HF/NFC RFID
Logistic valve meter cover

SPECIFICATIONS

Radiofrequency communication

- Frequency: HF/NFC 13.56 MHz; UHF 860 – 960 MHz – UHF EPC Global
- RF Standard: HF/NFC: ISO/IEC 15693; UHF: ISO/IEC 18000-6
- Technology: Passive
- Tag: NXP ICODE series/NTAG213; NXP, Alien, Impinj.

- Read/Write User memory: yes
- Password Protection: yes
- Read/Write cycles: 10000
- Data retention: 20 years

Performance
- Reading Distance: with handheld reader up to 3 cm with NFC, up to 5 cm with HF, up to 20 cm with UHF (depending on type of reader)
- Quality: 100% performance tested

Mechanical specifications

Art. 311   Art. 312   Art. 313   Art. 314
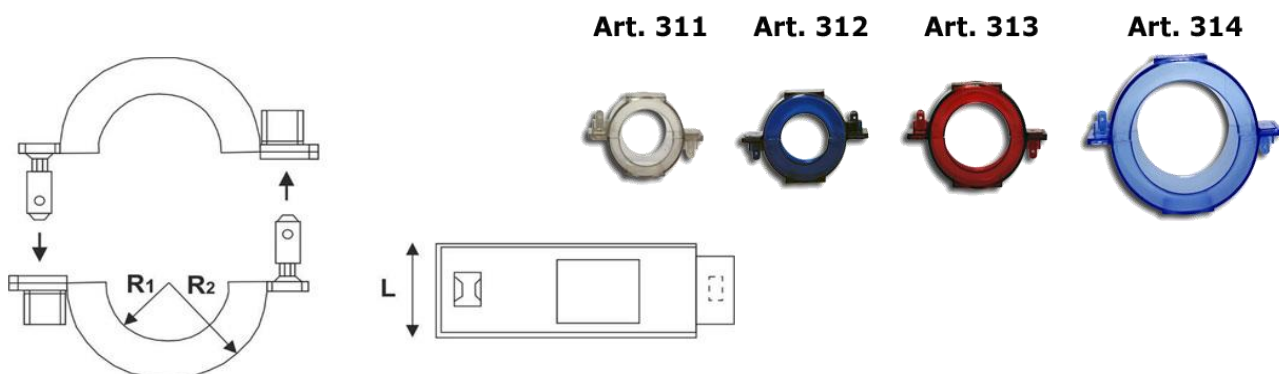
AVAILABLE SIZES
ART 311 : L: 26 mm   R1: 16 mm   R2: 22 mm; for DN20 (3/4") pipe-fitting
ART 312 : L: 30 mm   R1: 16 mm   R2: 24,5 mm; per DN20 (3/4") bold pipe-fitting
ART 313 : L: 28 mm   R1: 19 mm   R2: 27 mm; per DN25 (1") pipe-fitting
ART 314 : L: 38 mm   R1: 29 mm   R2: 39 mm; per DN40 (1½") pipe-fitting

TAGETE: UHF RFID PLATE
RFID metal plate for secure container identification

TAGETE by LeghornGroup is the ultimate solution for secure container identification by using UHF RFID plate, designed for application on container surfaces either with strong adhesive or screwing. Thanks to the particular tag antenna realization TAGETE guarantees a secure automatic identification function in applications of container access control and management in port, hub and terminal areas.

UHF RFID TAGETE RFID PLATE FOR SECURE CONTAINER IDENTIFICATION

The RFID technology provides automatic, contactless and without line of sight identification of the label.

It can be read quickly and accurately through fixed or portable devices operated by the staff. In case of use of vehicles, the identification and the control they can be operated on-the-go without need for the vehicle to stop.

The RFID chip can also be used to store additional information.

One can easily write into the chip by using standard RFID read / write devices. The information can be password protected.

*The presence of an **integrated UHF RFID chip** is used to associate the ISO unique container serial number. The plate is read at distance and the container or vehicle that is associated to it is automatically recognized, for example using fixed or portable RFID readers.*
__TAGETE can be customized__ by printing in black or in four-color logo, barcode or serial number.

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TAGETE: UHF RFID PLATE
RFID plate for secure container identification

Radio Frequency specification

- Frequency: 860 – 960 MHz - UHF EPC Global
- Reference RF Standard: ISO/IEC 18000-6C
- RF Protocol: EPC Class 1 Gen2 / ISO/IEC 18000-6C
- Technology: Passive
- Integrated circuit: NXP G2iM+
- Quality: 100% performance tested
- Memory read / write: Yes
- EPC Memory: 128 bit
- User Memory: up to 640 bit
- Password protection: Yes
- TID (tag unique identification):   Yes

Mechanical specification

- Material: PMMA, rubber
- IP Protection: IP65
- Operative Temperature: - 25°C / + 75 °C
- Storage Temperature: - 30°C / + 80 °C
- Size: 170 mm x 230 mm
- Weight: 250 g
- Fixing: with 4 screw or special glue

Electronic specification

- Reading distance handheld reader: 3 m (depending of reader)
- Reading distance fix reader: 11 m (depending of reader)
- Reading on metal surface   25 mm distance from metal surface for top performance
- Data retention: 20 year

UHF RFID WINDSHIELD TAG
Ultra destructible label for secure identification

WINDSHIELD TAG by LeghornGroup is the ultimate solution for adhesive UHF RFID security label, designed for application on glass surfaces, such as the windshield of vehicles.
Thanks to the particular antenna realization and to the special adhesive used, the label is damaged irreversibly if you try to remove it from the surface to which it is applied.
It is particularly suitable for secure automatic identification function in application of vehicle access control and parking management.

ULTRA DESTRUCTIBLE UHF RFID ADHESIVE LABEL FOR SECURE IDENTIFICATION

The RFID technology provides automatic, contactless and without line of sight identification of the label.

It can be read quickly and accurately through fixed or portable devices operated by the staff. In case of use of vehicles, the identification and the control they can be operated on-the-go without need for the vehicle to stop.

The RFID chip can also be used to store additional information.

One can easily write into the chip by using standard RFID read / write devices. The information can be password protected.

WATCH THE VIDEO!
https://youtu.be/df0Zk5QqH_U

WINDSHIELD TAG is a security label, of very simple application, which thanks to its mechanical and electrical characteristics operates as a real seal:

The **adhesive for special use** allows to apply the label easily and at the same time guarantees a tenacity for which the label is damaged permanently in an attempt to remove it, thereby preventing unauthorized (re) use (for example in applications of controlled access);

The presence of an **integrated UHF RFID chip** is used to associate an unique serial number to the label: the tag is then read at distance and the object or vehicle that is associated to it is automatically recognized, for example using fixed or portable RFID readers.

WINDSHIELD TAG **mounts an electronic chip which has its own unique code and cannot be duplicated**. This feature enables a secure and reliable automatic identification of the label, i.e. of object or vehicle associated with it.
The label face, in thermo-printable paper or PVC, can be customized by printing in black or in four-color logo, barcode or serial number.

UHF RFID WINDSHIELD TAG
Ultra destructible label for secure identification

SPECIFICATIONS

Radiofrequency communication

- Frequency: UHF 860 – 960 MHz; UHF EPC Global
- RF Standard: UHF: ISO/IEC 18000-6
- Technology: Passive; anti collision
- Tag: Alien H3
- Read/Write User memory: yes, 96 bits EPC,
- 512 bits User Memory, 32 bits TID
- Password Protection: yes
- Read/Write cycles: 10000
- Data retention: 10 years

Performance

- Reading distance up to 8 m, writing distance up to 2 m (depending on the type of reader)
- Quality: 100% performance tested

Mechanical specifications

- Dimensions: 110 x 45 x 0.3 mm
- Material: Thermal Paper / Sticker Printing
- Adhesive Type: 3M for special purpose
- Antenna: Aluminium
- Operating temperature: -15 ° C / + 70 ° C
- Relative humidity: ≤ 80%
- Delivery of labels: Reel of 1000 or 2000 pieces / reel
- Inner reel diameter: 76 mm
- Reel weight: 1 kg

Customisation

- Dimensions on customer's specification
- Pre-printing with logo, barcode or serial number, according to the specified layout
- EPC code initialization

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MENTOR SEAL RFID
High security electronic active seal

**MENTOR SEAL
RFID active high security
electronic seal**

The RFID technology
provides automatic,
contactless and without line
of sight identification of the
seal.

It can be read quickly and
accurately through fixed or
portable devices operated by
the staff. In case of use of
vehicles, the identification
and the control they can be
operated on-the-go without
need for the vehicle to stop.

The RFID chip can also be
used to store additional
information.

Long lasting battery (at least
one year of operation),which
enables:
Reading in long range
distance;
Log of the events occurred to
the seals, including
timestamp

Specifically designed to introduce a higher security level into the
logistics and transport supply chain, **MENTOR SEAL** is an
advanced electronic device that combines top mechanical
resistance against breaching with the security of no clonability
offered by the RFID, automatic radiofrequency identification
technology.

MENTOR SEAL comes with an
univocal identification code (ID)
stored in the embedded electronic
chip: the main functionality of the
seal of securing and protecting
goods is enriched by the additional
capability to optimize transport
logistics by tracking the container or
the vehicle and monitoring the status
of goods.

**It records every event occurred to
the seal** - initialization, closure,
attempt to breach and recover, final
opening - **with time and date of the
specific event**.

Specifically **MENTOR SEAL**

- Assures univocal coupling between seal head and bolt. Any
  attempt to replace the bolt with a new one - different from that
  initially coupled with the related head during the initialization
  procedure - will be treated as a tamper event.

- Stores in its internal memory timestamp of
  - seal initialization
  - seal locking
  - seal opening/tampering

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MENTOR SEAL
RFID active high security electronic seal

MENTOR SEAL is read either by gates or handheld readers equipped with the read/write unit that communicates with the seal in the operative frequencies of 433 MHz and 2.45 GHz. Thanks to the adopted active RFID technology the communication range can cover long distances (from 15 up to 30 meters depending on the type of reading antennas installed at gate).

READING DISTANCE

15 to 30 m

SPECIFICATIONS

- Case material: Shock-proof polystyrene
- Pin material :   Stainless steel
- Industrial Protection: IP65
- Operative temperature range: - 20°C / +55 °C
- Storage temperature range: - 20°C / +55 °C
- Size (max volume):   147.6 x 66.42 x 35 mm
- Seal head size: 66.42 mm
- Metal pin size: 8 mm diameter – length mm 74
- Weight: 180 g
- Mechanical closure: Bolt-lock type
- Battery: 3.0V
- Memory storage: 1000 data record
- Manufacturer code: UID CODE

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eLOCK Standard
Electronic reusable security lock

eLOCK Standard Electronic reusable security lock

Prevents internal theft and fraud along the entire supply chain

As soon as the seal is closed, it automatically generates a unique number that can be transferred to the cargo documentation. As long as the display shows the same number when the cargo arrives, you can be sure that the seal was not opened during the trip. If several stops are made on the journey, a new unique number is generated each time.

eLOCK Standard announces the unauthorized opening of the truck / container by generating a random number, which must be the same before and after the delivery of the cargo.
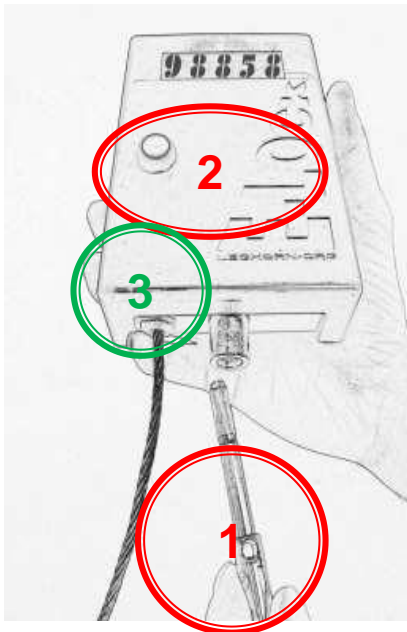
Entry-level product of the reusable electronic locks family manufactured by LeghornGroup, with basic features at a very competitive price.

How eLOCK Standard works?

eLOCK Standard works in a very simple way:

Each time the pin is pulled out of the plug (1) a random number is generated by the E-Lock (2) which is shown on the display for a few seconds and then stored in the internal device memory.

By pushing the green button (3), the previously generated number appears on the display.

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eLOCK Standard
Electronic reusable security lock

SPECIFICATIONS

- Dimension: 106x156x38 mm
- Weight: 810 gr
- Fixing: 4 M6 screws
- Actuator: Mechanical life 1.000.000 cycle
- Operative temperature: -20° C + 50° C
- Storing temperature: -25° C + 80° C
- Battery: Lithium Long life non rechargeable
- Waterproof: IP 67
- Sealing: Special rubber for outdoor use
- Case Material: Shock-resistant Polycarbonate
- Vibration: Vibration resistant
- Display: LED 5 Digit - Red - night readable
- Cable: Inox AISI 316
- Lock plug: Plug with spring lock
- Security: May be locked with other kind of security seal

ALERT LOCK
Electronic reusable security lock with GSM

ALERT-LOCK is a device for electronic locking of sites/goods/vehicles, which is equipped with GSM / GPRS communication.

It sends alarms informing about any open/close/tamper event with the device at the time the event occurs.

It has function of event notifications in real time.

How ALERT LOCK works?

ALERT LOCK is a self-powered electronic system for the monitoring of site, goods or vehicles against theft and tampering. It is able to send an SMS alert to a PC or to mobile phones in the event that gates, doors or packages protected by ALERT LOCK are opened or tampered with. Furthermore it can be used to protect and monitor access points to controlled areas. The device can be mounted either by screwing it in place or securing it with a magnetic plate.

ALERT LOCK functions:

REAL TIME ALERTING: ALERT LOCK is a device able to send real time messages, alerting about the state of almost any application point.

LONG LASTING, USB RECHARGEABLE BATTERY: ALERT LOCK is conceived for long lasting operation without the necessity of having to change the battery or recharge it. Low battery alert is send. Typical battery endurance:
- 4 years with 2 data transmissions per day;
- 1 year with 10 transmissions per day;
- 10 days, with continuous operation and transmitting data at 10 minute intervals.
- In standby> 10 years

ANTI-CUTTING FUNCTION: in the event of the security cable being cut, the device sends an alert.

DEACTIVATION FROM REMOTE: ALERT LOCK can be easily deactivated by making a call from your mobile phone. If the calling number is stored in the device memory list the alerting function can be stopped from remote.

OPERATIONS IN HARSH ENVIRONMENTS. The device can work at temperatures from -40° to + 85°

REDUCED MAINTENANCE: ALERT LOCK doesn't require any assistance or maintenance.

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eLOCK GOLD
Electronic reusable security lock with GSM and GPS

eLOCK GOLD Electronic reusable security lock with GSM and GPS functionalities

Real time alerting and recording of any access to the goods transported or stored: opening, closing or tampering (id device, type of event, date and time).

It has a long operation time thanks to its long-lasting battery, rechargeable via usb.

Gps tracking for location, control, geofencing.

eLOCK GOLD Advanced electronic reusable security lock, to control position and status of trucks and containers, either from fixed station or from mobile devices (smart phone and tablet).

Equipped with GPS and GSM/GPRS modules, it enables getting real time logistic information of identification together with the one of traceability.

eLOCK GOLD sends an SMS alert any time the lock register an event of opening/closure, tampering attempt (e.g. the cable is being cut), battery is low. Alert message includes ID, event type, GPS coordinates for the place the event took place at, and time stamp.

How eLOCK GOLD works?

Thanks to its advanced technical features, **eLOCK GOLD** allows you to enable features of:

MONITORING, thanks to its ability to communicate in real-time with IT systems for logistics and transport, it informs about the complete data on fleets and individual vehicles.

ANALYSIS of the data for the entire fleet relating to individual drivers, with the possibility of intervention and planning of activities.

CONTROL, through real-time access to data on vehicles and drivers, and to the position marked on the map by using GPS tracking.

*Used together with the **trackingonlineservice.com** platform it is a powerful instrument for vehicles and goods monitoring and tracking.*

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eLOCK GOLD
Electronic reusable security lock with GSM and GPS

SPECIFICATIONS

- Dimension   mm 106 X 156 X 38
- Material   High-resistant polycarbonate; Waterproof case
- Power supply   5 VDC
- Working voltage   3,3 VDC
- Average current   80 mA
- Current in standby mode: 15 uA
- Internal battery 4,2 VDC 6600 mAh - Lithium battery, rechargeable via USB
- Working hour
    - Two data per day: 4 years
    - Ten data per day: 1 years
    - Continuous every 10 minutes : 10 days
    - Stand by   > 10 years
- CPU   Microcontroller System on Chip   Cypress ARM Cortex-M3
- GSM   GSM/GPRS module : Quectel M95
- Frequency band   Quad-band: GSM850, EGSM900, DCS1800, PCS1900 MHz
- Antenna   Internal antenna
- GPS   Compact GNSS Module, Quectel L86 GPS + GLONASS
- Positioning accuracy   2,5 m
- GPS sensitivity   167dBm@Tracking, -149dBm@Acquisition
- Positioning time   Cold Start <35s; Warm Start <30s; mHot Start <1s
- Satellite receiving channel: 99 acquisition channels, 33 tracking channels
- Antenna   embedded patch antenna
- LED indicator for GSM / GPS status
- Operating temperature   -15°C to 60°C
- Storage temperature   -20°C to 60°C
- Operating humidity   60±25%R.H
- Cable material   insulated plastics, anti wringing, anti cutter
- Cable length   75 cm
- Closure pin   spring blocking system
- Security   Possibility to block the system by using seals
- Log memory   Last 700 data recorded
- Data program /Data download/Firmware upgrade: via USB

SPYLOCK
Quantum leap for security in transport

ELECTRONIC REUSABLE LOCK THAT

Registers any unauthorised access to goods, either transported or stored (opening, closing or alteration). Registered data are device id, type of event, time stamp.

Long operational autonomy thanks
To long life battery, usb rechargeable.

Gps tracking
Available as option.

Built-in nfc technology,
For operator identification.

You Tube

HTTPS://WWW.YOUTUBE.COM/WATCH?V=F7FTGR7WICE

SPYLOCK is a reusable electronic lock specifically designed for greater security in the supply chain of transport logistics.

SPYLOCK combines security and ability to monitor the status of the goods transported by trucks, trailers and containers through the following features: Record any access to goods: opening, closing or tampering (device ID, and time).It has a long operating time due to power with durable battery (USB rechargeable).GPS tracking is available as an option.

THE NEED

Providing consumers and businesses around the world with the huge variety of products they need would be impossible without modern transport logistics on land, sea and air and, with increasing globalization, the security issues related to all this movement are more and more significant. Valuable goods must be protected from various threats: theft, accidents, sabotage, robbery.

Experience has shown that operators may alas be responsible for a part of the theft that occurs, which means it is no longer enough to rely on tamper-proof containers and access controls. You need an additional level of security, something that allows you to monitor what is happening across the entire transport chain.

THE SOLUTION

SPYLOCK fully meets this need, thanks to its features that allow:

identification both of the operator and the device used;

recording of any event occurring to the device: closing, opening, tampering;

ability to upgrade with additional feature of GPS tracking.

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SPYLOCK
Quantum leap for security in transport

SPECIFICATIONS

- Dimensions: 131 x 67 x 35 mm
- Wire standard length: 110 mm
- Wire diameter: 2,5 mm
- Weight: 180 g
- Wire material: Stainless steel
- Device enclosure: ABS
- Industrial protection class: IP65
- Mechanical closure: Closing actuatocoupling with spring button
- Operative Temperature: - 20°C / +55 °C
- Storage Temperature: - 20°C / +55 °C
- Display: Backlit White, 32   characters (2 x 16)
- Communication interface: USB 2.0
- Battery   Rechargeable 1100 mAh 3.7V
- Memory storage: 1000 data record
- Password protection: Software
- Tamper security: Sensor to detect case opening
- Manufacturer Code: UID CODE
- Management Code: Software Code
- RFID: HF NFC Tag

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JANUS GATE
UHF RFID Gate

It is an «all-in-one» automatic identification RFID UHF ISO/IEC 18000-6 compliant system specifically designed and manufactured to monitor and manage the movement of trucks and containers and their access to terminals, hubs, ports.

This system, built on smart UHF RFID reading units and passive (battery-free) RFID UHF seals - named e-SEALS, is able to identify and monitor in a reliable and secure way trucks, trailers, and containers.

RF protocol	**EPC Class 1 Gen2 – ISO/IEC 18000-6C**
Operating frequency:	865-869 MHz, ETSI EN 302-208
Communication protocols:	ISO 18000-6C; EPC Class1 Gen2;
Antennas:	Special integrated system of 2 antennas
RF Power:	Software programmable up to +32.5 dBm (+30dBm if used in POE mode)
Reader power supply:	POE IEEE802.3 or 24 Vdc, 0,8A with expternal power supply
Main:	100-240 Vac, 50/60Hz
Communication ports:	Ethernet 10/100 Base-T Ethernet (RJ45);
Ext Sensors / Photocells	To trigger reading signals
Address configuration:	DHCP, Static, LLA + mDNS
Environmental conditions:	Operative temperature: -20°C +50°C Stock Temperature: -20°C +60°C
Base module size	560 x 270 mm +/- 5%
Weight:	4000 g
Certification:	CE (FCC also available)
Housing:	Anodised aluminum & Polyethylene
IP protection	IP55

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RFID TROLLEY
The simplest way to read RFID seals on the field

RFID TROLLEY is a self-standing and moving-on-wheels UHF RFID read/write solution for:

▪ Fast and efficient inventory operations.

▪ Outdoor logistics operations, whenever it is not possible nor convenient to set fixed reading equipment.

RFID TROLLEY has been specifically designed to work in harsh environment (industrial and outdoor) and with its robust IP65 stainless steel case and antennas it is the best work companion to carry out RFID reading operations in any operation area where fixed solutions are not possible or convenient.

RFID TROLLEY mounts adjustable high-performance antennas (up to four), which helps in finding the best placement to assure maximum reading efficiency and reliability

RFID TROLLEY has wheels and handle that make very easy and light to move it across different areas, enabling RFID reading operations in modes and places that were not possible before, like for instance reading RFID seals on-the-go at harbour docks directly when loading-unloading containers into ships.

RFID TROLLEY comes together with a rugged tablet, Android OS, useful to set reader operation modes accordingly to different locations and to control data flow by operator. A suitable pocket is placed inside the trolley case to safely store the tablet when unused.

RFID TROLLEY
The simplest way to read RFID seals on the field

RFID TROLLEY
Main technical features

- Top performing RFID UHF reader.
- Two/Four adjustable external antennas.
- Lights for feedback to operators.
- Battery supplied with working endurance higher than eight hours.
- Communication interfaces: Ethernet, GSM/GPRS.
- Tablet with pre-installed SW for trolley set up, diagnostics, and maintenance.

RFID specifications:
- UHF Long Range Reader with GPRS
- EPC C1 G2, ISO 18000-6C Compliant
- Multi-Regional Support
- Embedded Intelligence
- Ethernet Port
- USB 2.0 High Speed Host Port
- Internal MicroSD slot
- Integrated GPRS modem (optional)

Mechanical specifications:
- Metal cabinet size: cm 55x75x25
- Overall Trolley size: cm 55x110x60
- Antennas bar length: cm 150
- Weight : kg 55

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RFID READER - WRITER

EPR AT880 Hand-Held UHF RFID Reader

EPR AT880 is a PDA WM 6.5 full option, provided with both UHF and HF RFID frequency, which allows to develop a solution based on personal application requirements.

Main technical specifications:

- Windows CE 5.0 / Windows Embedded handheld 6.5

- Processor Marvell PXA 320 806MHz

- Memory   RAM: 256 MB (optional 512 MB)

  ROM: 512 MB (optional 1 GB)

- RFID UHF 900 MHz GEN2, ISO / IEC 18000-6C / 18000-6B (optional)

- RFID HF 13.56 MHz ISO15693, MIFARE, ISO14443 A / B (optional)

- Barcode Engine 1D Laser o 2D Imager Scanner (2D long-range barcode reading)

- WLAN IEEE802.11 b / g / a (a / b / g / n, optional)

- Bluetooth Class II, v2.1 + EDR

- Camera with Flash

- GPS

RFID READER - WRITER

EPR AT880 Hand-Held UHF RFID Reader

SPECIFICATIONS

- Physical Characteristics (LxWxH): 159 x 79 x 27,7 (35,2) mm

- Weight: 280 g (PDA only, without battery)

- Reading range: 0M ~ 5M (according to Tag & Environment)

- Protocol: GEN2, ISO / IEC 18000 - 6C / 6B (optional)

- Frequency range: CE ETSI 865 MHz ~ 868 MHz, FCC 902 MHz ~ 928 MHz

- Operating temperature: -20 ° C ~ 60 ° C;

- Storage temperature: -30 ° C ~ 70 ° C

- Humidity: 95% non-condensing

- Power:

  - Main Battery lithium-Ion Polymer 3,7 V 2,970 mAh (rechargeable).

  - Backup Battery lithium-Ion Polymer 3.7 V 80 mAh (rechargeable).

  - Power adapter input AC100V ~ 240 V / output DC 5V 3A

PROCESSOR AND MEMORY

- Processor: Marvell PXA 320 806MHz

- Memory: 256 MB (512 MB optional) RAM / 512 MB (1 GB optional) ROM

ACCESSORIES

Adapter AC Cable

Protection Film

USB Cable

Handstrap

Stylus Pen

OPTION

Cradle

GUN Handle

Applications:

Distribution:	Provisions general monitoring
Healthcare:	Monitoring and healthcare inventory
Warehouse:	Provisions monitoring and inventory
Logistics:	Shipping and receiving
Transport:	Transport routes accounting
Production:	Production progress control

NFC READER - WRITER

EPR CM398 Hand-Held NFC RFID Reader

EPR-CM398 is a high speed Quad-core industrial Android smart phone. It integrated UHF RFID reader and NFC for easy data capture. It supports Wi-Fi, Bluetooth, GPS, GSM / 3G, which make communication conveniently. With protection rate of IP65, it can withstand use in all kinds of rough environment.

Main technical specifications:

- O / S: Android v4.1.2 operative system
- Processor Qualcomm MSM8625Q, Quad-Core 1.2GHZ
- Memory : Flash ROM 1G RAM + 4G; Expansion (microSD) 32G (maximum)
- Display: 3,8 " capacitive multi-touch screen; Resolution: 800 * 480 dpi
- Data entry method: handwriting, keypad; 12 alpha/numeric keys; 2 telephone keys
- Port: USB 2.0, support OTG
- Power: 3,7 V Li-Polymer battery 1900 mAh, 4000 mAh (optional); Standby time: 72 ore; Charging time: 5-6 hours
- Communication: WLAN: Wi-Fi IEEE802.11b / g - GSM / GPRS / EDGE 850/900/1800 / 1900MHz - WCDMA 2100MHz, CDMA2000 - Bluetooth 4.0
- **NFC, HF: 13,56 M (ISO14443A / B, Protocol 15693), reading distance 4 cm.**
- RFID UHF, UHF: 920-925 MHz (EPC C1 / G2, 18000-6C Protocol), reading distance up to 40-50 cm according to different tags.
- Camera: 5.0 Mega Pixel, auto focus, with LED light
- Barcode: 1D barcode that ca be decoded via camera
- Scanner: 2D image : readable QR code via camera
- GPS: built-in GPS SIRF, support A-GPS
- Size (L x L x A): 135 x 69 x 16 mm; Weight: 150g (battery included)
- Colour: black

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Since 1978

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