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PRODUCT MANUAL

Committed to providing high-performance RFID product for our customers

COMPANY »> PROFILE

PRODUCT >>> CONTENTS

UHF MODULE

P31-32

Founded in 2009, Shenzhen Leadercolor Smart Card Co.,Ltd is a comprehensive trade company based on designing, developing, producing and selling products, such as magnetic stripe cards, smart cards, smart tags and etc. Our company is located in the beautiful Longgang District, Shenzhen City, with an elegant environment and convenient transportation.

"Leading technology, human care" is the business philosophy we have been always adhering. Since established, we have been taking "Science and technology services life" as our responsibility, and determining to provide our clients with PVC cards, smart cards, smart tags and other RFID customized services.

On team building, our company has concentrated on personnel training and support. It is a team full of passion and dream, with solidarity working and constant pioneering. We always strive to grow with our staff and create a brilliant together with them!

Our company has been developing new markets by excellent quality and attracting customers by best service. Relying on years of accumulated customer-resources and rich experience, Leadercolor has achieved great success in overseas markets, building a friendly relationship with customers in various countries and regions, and reaching strategic cooperation with many famous companies.







Part5

Part1	RFID TAG
■ UHF RFID Windshield Tag	P1-2
■ UHF RFID Tag	P3-5
■ UHF RFID Anti-metal Tag	P6-8
■ UHF RFID Clothing Tag	P9-10
■ UHF RFID Jewelry Tag	P11-12
■ NFC Sticker	P13-15
■ RFID Library Tag	P16-17
■ RFID Wristband	P18-20
■ Sports Tag	P21
■ UHF RFID Hard Tag	P22
Part2	RFID ANIMAL EAR TAG
	P23-26
Part3	RFID SMART CARD
	P27-28
Part4	RFID READER
diti	P29-30

Our Certificates



Our Company







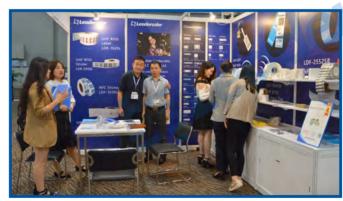






Our Advantages

- Tlexible Size
- On Design And Special Functional
- One of the second of the se
- Quality
- ® Pre-sales Services
- Innovative
- Market Protection
- ® After-sales Service







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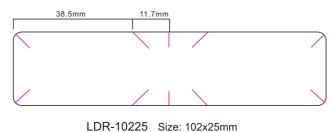


UHF RFID Windshield tag is designed in RFID technology with chip and inlay inside. It is mainly used for automatic vehicle identification system and auto glass retail management. It's with long reading range over 10 meters, waterproof and tamper proof which makes it an high end product in access control.







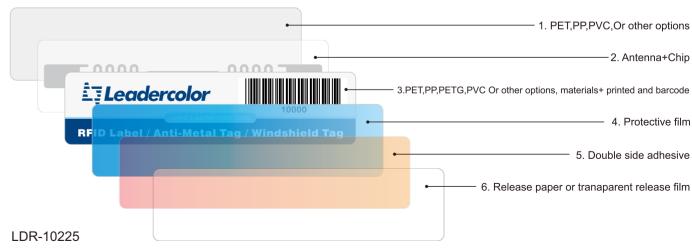


RFID Parameters

Item No.	LDR-10225	LDR-6425	LDR-10035
Size	102×25mm/4.02×0.98inch	64×25.4mm/2.5×1inch	100×35xmm/3.94×1.38inch
Protocol	ISO/IEC 18000-6C, EPC Class1 Gen2		
Frequency	Worldwide 840-960Mhz, US 902-928mhz, EU 865-868Mhz		
Chip	Alien Higgs-3		
Memory	EPC 96bits、TID 64bits、User 512bits		
Read&Write	Supported		
Read Range	1-15meters adjustable(reader and environment dependent)		
Data Retention	Years		
Write Endurance	100,000 cycles		

Physical Parameters

Substrate Material	Release paper
Substrate Material	Release paper
Antenna Material	Aluminum etching
Surface Material	PET waterproof
Printing	Offset printing, barcode, series number and logo printing
Encode	Supported
Tamper Proof	Yes
Strong Glue	Yes
Installation	Self adhesive
Operating Temperature	-50°C ~ +85°C
Operating Humidity	20% ~ 90%RH
Package	Roll / Single



UHF RFID Tag

Quick Details

UHF RFID tag adopts a unique tag antenna design, has excellent performance, can read multiple tags at a long distance, and has high recognition sensitivity. It is widely used in supply chain, asset management, logistics warehousing, anti-counterfeiting and anti-channeling. It supports printing on the printer by volume, and the product shape and logo printing can be customized according to customer needs.











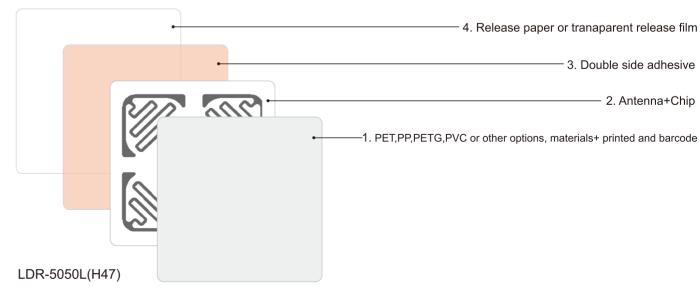


Customized Service:

- Customizable size
- Optional chips: Alien Higgs-3; Alien Higgs-4; NXP Ucode 7; Impinj Monza4; Impinj Monza5;
- Optional materials: Coated paper; PVC paper; Synthetic PP paper; PET paper;
- Optional glues: Standard glues; 3M glues; Strong glues;
- Optional printing: Offset printing; Barcode printing; Series number printing; UV printing
- Optional crafts: Tamper proof; Encoding;

RFID Parameters	
Item No.	LDR-5050L
Protocol	ISO/IEC 18000-6C, EPC Class1 Gen2
Frequency	Worldwide 840-960Mhz, US 902-928mhz, EU 865-868Mhz
Chip	Impinj Monza4 H47
Memory	EPC496bits、TID 48bits、User128bits
Read&Write	Supported
Read Range	1-6 meters adjustable(reader and environment dependent)
Data Retention	10 years
Write Endurance	100,000 Cycles
3D Function	Yes

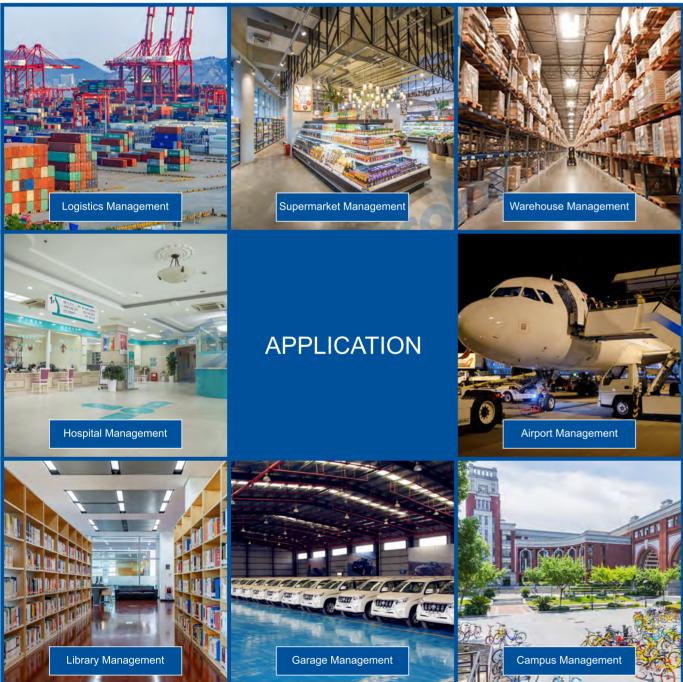
Physical Parameter	s <mark>s e</mark> contraction of the contr
Size	50x50mm (Can be customized)
Substrate Material	Transparent release film
Antenna Material	Aluminum etching
Surface Material	Coated paper (Thermal or transfer optional)
Printing	Offset printing, barcode, series number and logo printing
Encode	Supported
Installation	Self adhesive
Operating Temperature	-25°C~ +65°C
Operating Humidity	20% ~ 90%RH
Package	Roll / Single



—3—

Application

- Tracking challenging materials and objects
- Logistic and shipping labels
- File folder and document management
- Manufacturing and warehouse management



UHF RFID Anti-metal Tag

UHF RFID anti-metal tags are specially designed and designed and manufactured for use in harsh environments. They are installed on metal surfaces. Weak interference with RF signals on metals. Technically, the problem that the normall rfid labels cannot be attached to the metal surface is solved. The product is waterproof, acid-proof, alkali-proof and collision-proof. Can easily manage metal materials.

UHF Anti-metal Tag

LDR-25015M

UHF Licence Plate Tag



UHF Anti-metal Sticker



LDR-13012M

UHF Anti-metal Tag

LDR-6025M

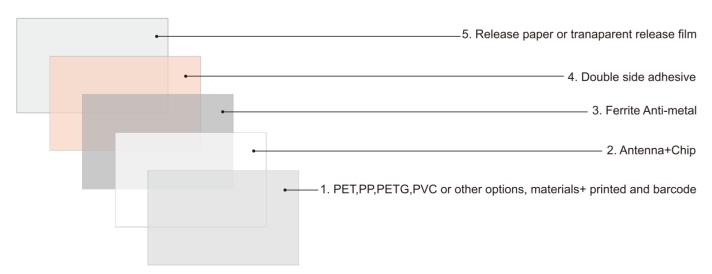
UHF Anti-metal Sticker

- Customizable size
- Optional chips
- Optional materials
- Optional glue
- Optional printing
- Optional crafts



RFID Parameters	
Item No.	LDR-4025M
Protocol	ISO/IEC 18000-6C, EPC Class1 Gen2
Frequency	EU Standard 865-868mhz, US Standard 902-928mhz
Chip	Impinj Monza MR6-P
Memory	EPC128(96)bits、TID 48bits、User32(64)bits、User 512bits, Password: 32bits access, 32bits kill
Read&Write	Supported
Read Range	Max. 0.45meter
Data Retention	10 years
Write Endurance	100,000 cycles
Anti-collision	Support multiple tags reading

Physical Parameters		
Size	42x25x0.9mm (Can be customized)	
Substrate material	Transparent release film	
Antenna material	PET +Aluminum etching	
Surface material	Ferrite anti-metal	
Printable	Supported for RFID printer	
Encode	Supported	
Installation	Self adhesive	
Operating Temperature	-40℃~ +85℃	
Operating Humidity	20% ~ 90%RH, Non-condensing	
Package	500pcs/roll	
Remark	When it pastes on curving objects, the read range will be shorted by half.	



Application

- Item level management
- RFID asset tracking management
- Hospital equipment management
- Metal devices supply chain management







-7—



UHF RFID Cothing Tag

RFID Clothing tag is the "ID card" of clothing. It is small in size and easy to install and operate, so that the controlled target can be managed in the whole process and in all directions. It can be recognized from a long distance, with high recognition sensitivity and fast speed, and has a globally unique identification code (TID code). It is mainly used in a wide range of apparel, luggage and footwear industries.

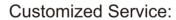




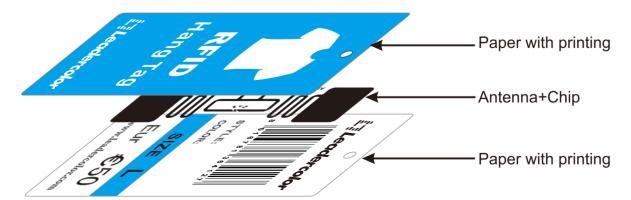








- Customizable size
- Optional chips
- Optional materials
- Optional glue
- Optional printing
- Optional crafts



RFID Parameters

Item No.	LDR-9040H
Protocol	ISO/IEC 18000-6C, EPC Class1 Gen2
Frequency	Worldwide 840-960Mhz, US 902-928mhz, EU 865-868Mhz
Chip	Ucode 8
Memory	EPC128bits、TID96bits、User32bits
Read&Write	Supported
Read Range	1-10meters adjustable(reader and environment dependent)
Data Retention	10 years
Write Endurance	100,000 cycles
Anti-collision	Support multiple tags reading

Phy	ysical	Param	eters
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Size	90×40×0.76mm (Can be customized)
Substrate Material	Paper
Antenna Material	Aluminum etching
Installation	Self adhesive
Operating Temperature	-10°C ~ +65°C
Operating Humidity	20% ~ 90%RH
Package	Bags









LDR-9040H



UHF RFID Jewelry Tag

Jewelry labels are mainly used for display at jewelry counters to improve product quality and make jewelry management easier. But it can also be used in watches, glasses and various other industries. High recognition sensitivity, high security, anti-theft, and improved inventory efficiency.

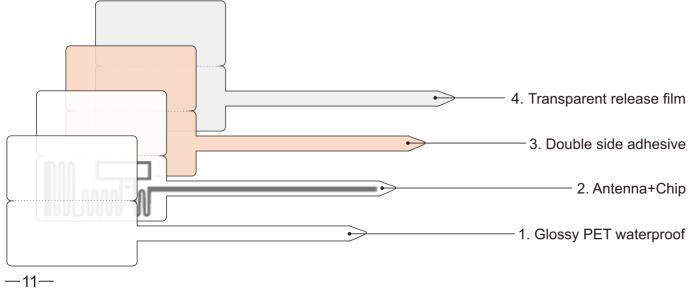






Customized Service:

- Optional materials: Coated paper; PVC paper; Synthetic PP paper; PET paper;
- Optional glues: Standard glues; 3M glues; Strong glues;
- Optional printing: Offset printing; Barcode printing; Series number printing; UV printing



RFID Parameters

Item No.	LDR-G201
Protocol	ISO/IEC 18000-6C, EPC Class1 Gen2
Frequency	Worldwide 840-960Mhz, US 902-928mhz, EU 865-868Mhz
Chip	Ucode 8
Memory	EPC128bits、TID96bits、User32bits
Read&Write	Supported
Read Range	1-10meters adjustable(reader and environment dependent)
Data Retention	10 years
Write Endurance	100,000 cycles
Anti-collision	Support multiple tags reading

Physical Parameters

Size	Folded 26×14mm , Tail 46mm (can be customized 可定制尺寸)
Substrate Material	Paper
Antenna Material	Aluminum etching
Installation	Self adhesive
Operating Temperature	-10°C ~ +65°C
Operating Humidity	20% ~ 90%RH
Package	Bags





NFC Sticker

NFC tags are developed based on non-contact radio frequency identification (RFID) technology and combined with wireless interconnection technology. It provides a very safe and fast communication method for various electronic products that are more and more popular in our daily life. The short-range wireless communication technology combines mobile communication technology to realize multiple functions such as electronic payment, identity authentication, ticketing, data exchange, anti-counterfeiting, and advertising







LDF-3030L



NFC Anti-metal Label



LDF-D16L

LDF-D25M NFC Anti-metal Label



LDF-7650L



Customized Service:

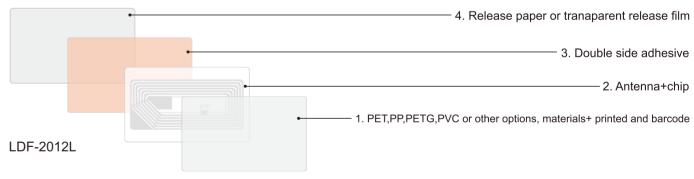
- Customizable size
- Optional chips
- Optional materials
- Optional glue
- Optional printing
- Optional crafts

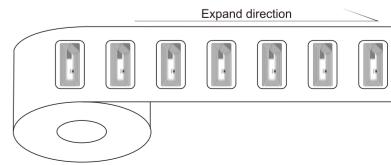
RFID Parameters

Item No.	LDF-2012L
Protocol	ISO / IEC 14443 A & 18000-3
Frequency	Worldwide HF 13.56Mhz
Chip	NTAG® 213
Memory	UID 7Byte 、User 144 Byte
Read&Write	Supported
Read Range	0.1-10cm
Data Retention	10 years
Write Endurance	100,000 cycles

Physical Parameters

Size	20x12mm (Can be customized)
Substrate Material	Transparent release film
Antenna Material	Aluminum etching
Surface Material	Coated paper
Encode	Supported
Installation	Self adhesive
Operating Temperature	-25°C ~ +65°C
Operating Humidity	20% ~ 90%RH
Package	6000pcs/roll







Application

- NFC posters,NFC device data connection and data transmission
- Mobile payment, mobile wallet
- Product identification, personnel identification management
- E-ticketing, loyalty system, marketing and advertisements



RFID Library Tag



RFID "intelligent collection system" includes a series of automated management systems such as librarian service system, chip conversion system, self-service borrowing system, self-service return system, collection inventory inspection system, and channel detection system. Each book is affixed with an RFID tag, and an RFID inspection machine is installed at the exit of the library. When someone leaves the library and carries unchecked books or other media materials with RFID tags, the RFID inspection machine will sound an alarm. If someone tries to avoid the alarm and take the book away, the library can still track the book and put it in place.





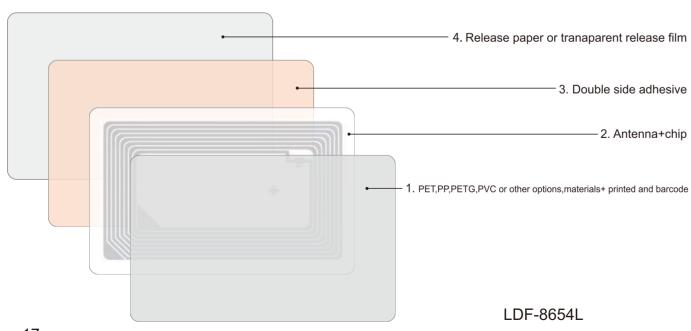


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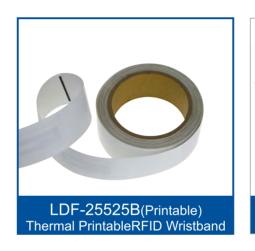
RFID Parameters				
Item No.	LDF-8654L			
Protocol	ISO/IEC 15693 & 18000-3			
Frequency	Worldwide HF 13.56Mhz	Worldwide HF 13.56Mhz		
Chip	ICODE® SLIX	ICODE SLI(ICODE 2)		
Memory	UID8Byte 、User1024Bit	UID 64bit 、User 1024Bit		
Read&Write	Supported	Supported		
Read Range	0.1-20cm adjustable (reader and env	0.1-20cm adjustable (reader and environment dependent)		
Data Retention	10 years			
Write Endurance	100,000 cycles			
Anti-collision	Support multiple tags reading	Support multiple tags reading		

Physical Parameters	
Size	86×54mm (Can be customized)
Substrate Material	Transparent release film
Antenna Material	Aluminum etching
Surface Material	Coated paper(Thermal printable)
Encode	Supported
Installation	Self adhesive
Operating Temperature	-25°C ~ +65°C
Operating Humidity	20% ~ 90%RH
Package	2000pcs/roll, 4 rolls/carton



RFID Wristband

The RFID wristband is a disposable wristband using RFID technology. It can be made of multiple layers of PVC or paper materials. It has the characteristics of resistance to tension, comfort and durability, comfortable to wear, beautiful in appearance, and decorative; Divided into disposable wristbands and reusable wristbands, the main function is object recognition and tracking. Customers can customize the material and size according to their needs.















Customized Service:

- Customizable size
- Optional chips
- Optional materials
- Optional glue
- Optional printing
- Optional crafts

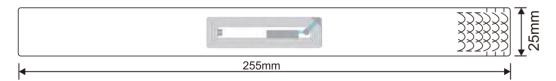
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RFID Parameters				
Item No.	LDF-25525B			
Protocol	ISO / IEC 14443 A			
Frequency	Worldwide HF 13.56Mhz	Worldwide HF 13.56Mhz		
Chip	Compatible MIFARE Classic® 1K	MIFARE Ultralight® C		
Memory	UID 4/7Byte 、User 1KByte	UID 7Byte 、User 153Byte		
Read&Write	Supported			
Read Range	0.1-10cm adjustable reader and environment	0.1-10cm adjustable reader and environment depended		
Data Retention	10 years			
Write Endurance	100,000 cycles	100,000 cycles		

Physical Parameters	
Size	255×25mm (Can be customized)
Substrate Material	PET paper
Antenna Material	Aluminum etching
Surface Material	Coated paper
Encode	Supported
Installation	Self adhesive
Operating Temperature	-25°C ~ +65°C
Operating Humidity	20% ~ 90%RH
Package	Single

LDF-25525B



LDR-37025B



Application

- School and hospital;
- Sport race timing, amusement park;
- Bathing spot management, moist places;
- Swimming pool, bath center, access control;
- Ticket, Waterproof inspection, campus;



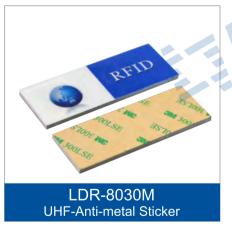


—19—

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Hard tags can be directly attached to "harder" products. Hard tags have a higher one-time cost than soft labels and can be reused. Has good waterproof and moisture resistance, wear and tear resistance, ruggedness, shock resistance and other properties. Product chip, frequency, shape, color, etc. can be customized according to demand.















The RFID key fob is composed of ABS shell encapsulating the chip coil and filled with epoxy resin, and combined by ultrasonic welding. The product is small in size, easy to carry, strong and durable, and does not fade. It can be hanged on the key chain; the surface can be spray coded, engraved, sprayed and engraved with water, sprayed with letters, etc.





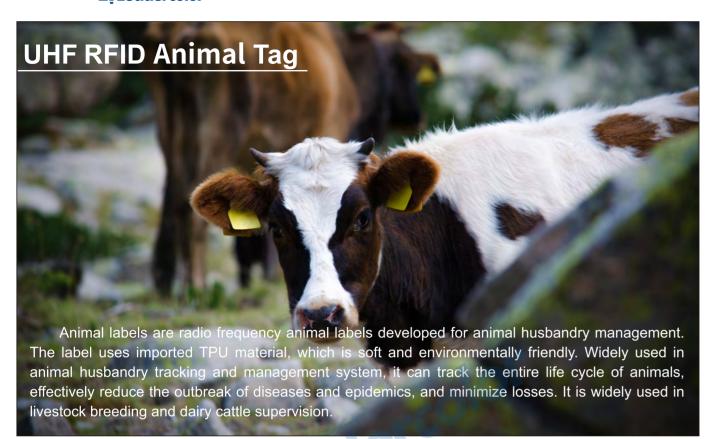








—21—











LDR-D33A

UHF RFID Button Ear Tag

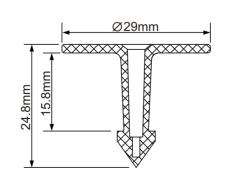


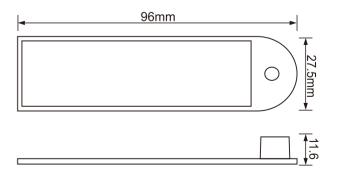
UHF RFID Strip Ear Tag



RFID Parameters LDR-2796A Item No. ISO/IEC 18000-6C, EPC Class1 Gen2 Protocol Frequency Worldwide 840-960Mhz Chip Ucode 8 EPC128bits、TID96bits、User32bits Memory Read&Write Supported Read Range 1-10meters adjustable(reader and environment dependent) **Data Retention** 10 years Write Endurance 100,000 cycles Anti-collision Support multiple tags reading

Physical Parameters	101
Size	Tag: 96×27.5×13.5mm Stud: Dia 29×24.8mm (can be customized 可定制尺寸)
Color	Green, yellow, other color customized
Antenna Material	PET+ Aluminum etching
Surface Material	TPU AAA, soft, non-toxic, Anti-microbial, UV-light proof and environmental friendly
Installation	Ear tag plier
Operating Temperature	-10°C ~ +65°C
Operating Humidity	20% ~ 90%RH
Package	Ear tag&stud/set, 100sets/bag,10bags/carton
Customized Service	Laser printing, EPC pre-written, color, laser printing, chip&inlay



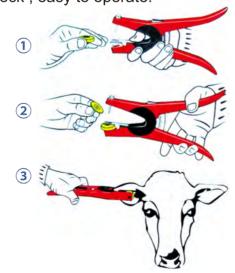




Muli-use Ear tag Applicator

- 1. Ear marking plier is used to install the ear tag on the pig, sheep, cattle etc.
- 2. Aluminum alloy material, shell high-grade painting material never rust, durable.
- 3. Resonable design according to the human plam, automatic lock, easy to operate.





Item No.	Size	Applicartion	QTY(sets)	N.W	G.W	Carton Size
LD-AP01	240x65mm	animal	50	16.5kg	18kg	40x30x26cm

No chip animal ear tag series

Item No.	Size	Applicartion	QTY(sets)	Carton size	Product picture
LDD-11575A	115x75mm	Elephant	1000	43x30x27cm	
LDD-8172A	81x72mm	Cow	1000	33x33x30cm	
LDD-7058A	70x58mm	Cattle	1500	37.5x33.5x36.5cm	
LDD-4841A	48x41mm	Pig	2500	37.5x33.5x36.5cm	N .
LDD-5555A	55x55mm	Pig	2000	39x30x32cm	
LDD-5318A	53x18mm	Pig	3000	37x33.5x36.5cm	

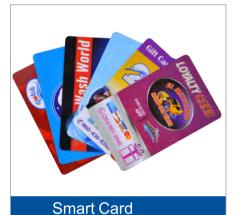
Physical Parameters

LDD-4841A Size	Tag: 48×41mm Stud: Dia 30×23mm (Can be customized)
Color	Green, yellow, other color customized
Surface Material	TPU AAA, soft, non-toxic, Anti-microbial, UV-light proof and environmental friendly
Installation	Ear tag plier
Operating Temperature	-20°C ~ +80°C
Operating Humidity	20% ~ 90%RH
Package	Ear tag&stud/set, 100sets/bag, 2500pcs/carton
Customized Service	Laser printing, EPC pre-written

—25—

RFID Smart Card

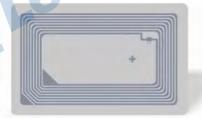
"Smart Card" is based on IC card technology and uses computer and communication technology as a means to connect the various facilities inside the intelligent building into an organic whole. Users can complete the usual key and fund settlement through an IC card., Attendance and certain control operations, such as opening the door with the IC card, shopping, entertainment, meetings, parking, charging services and other activities.

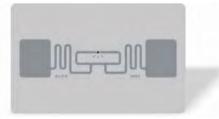












125Khz 13.56Mhz

860-960Mhz

RFID Parameters	
Item No.	LDF-8654C
Protocol	ISO/IEC 14443A & 18000-3
Frequency	Worldwide 13.56Mhz
Chip	Compatible MIFARE Classic®1K
Memory	UID 4/7Byte、User 1K Byte
Read&Write	Supported
Read Range	1-10cm adjustable (reader and environment dependent)
Data Retention	10 years
Write Endurance	100,000 cycles

Physical Parameter

Size	86×54×0.84mm (Can be customized)		
Material	Plastic PVC		
Surface Material	Matt or glossy		
Operating Temperature	-10°C ~ +50°C		
Operating Humidity	15% ~ 95%RH		
Package	200pcs/box, 10boxes/carton		

Optional Chips:

NTAG Series: NTAG®203,

NTAG®213,

MIFARE Series: MIFARE Classic® 1K, MIFARE Classic® 4K, MIFARE Plus® 2K, MIFARE Plus® 4K, MIFARE® DESFire® 2K MIFARE® DESFire® 4K MIFARE® DESFire® 8K, MIFARE Ultralight®, MIFARE Ultralight® C.

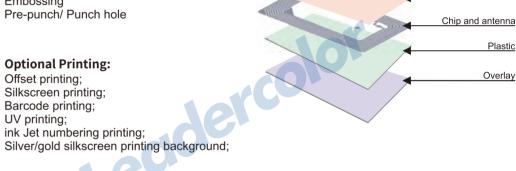
Optional Crafts:

Hologram, holographic stamp, Encoding, Magnetic stripe, Numbering, Barcode, photo Signature panel, Embossing Pre-punch/ Punch hole

Optional Printing:

Offset printing; Silkscreen printing; Barcode printing; UV printing; ink Jet numbering printing;

NTAG®215, NTAG® 216.











Plastic

RFID Reader

The RFID reader automatically recognizes the target object and obtains relevant data through the radio frequency identification signal, without human intervention, it can identify high-speed moving objects and can simultaneously identify multiple RFID tags, and the operation is fast and convenient. There are fixed and handheld RFID readers. Handheld RFID readers include low frequency, high frequency, ultra high frequency, and active.













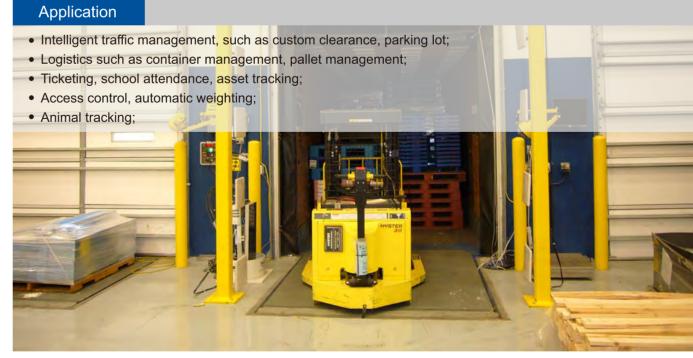






RFID Parameters	
Item No.	LDR-RI01W
Protocol	ISO/IEC 18000-6C and 6B, EPC Class1 Gen2
Frequency	Worldwide 840-960Mhz, US 902-928mhz, EU 865-868Mhz
Antenna	Built-in 8dbi Circular polarization antenna
Transmit Power	0 ~ 30dBm adjustable
Working Mode	Read&Write supported
Reading Speed	Max. 100tags/s
Read Range	1-6m adjustable, tag and environment dependent
Software Kits	Provide free Demo for testing and SDK for development
Software Compatibility	Win XP, Win7, Win8 or Win10

Physical Parameter	s de la companya de		
Size	235x235x57mm(US) 260x260x45mm(EU)		
Material	ABS Waterproof		
Mounting	Bracket		
Data Interface	WIFI, RS232/UART		
Power Supply	Single +9V~12V DC		
Operating Temperature	-10°C ~ +60°C		
Operating Humidity	20% ~ 90%RH		
Accessories	1×Bracket, 1×Power cable		
Package	200pcs/box, 10boxes/carton, G.W 14kg, carton size 32×48×14cm		
Customized Service	Ethernet/wifi port; Cable meters; Relay; External antenna; Module; Led indicator; Circular antenna		



—29—



UHF Module

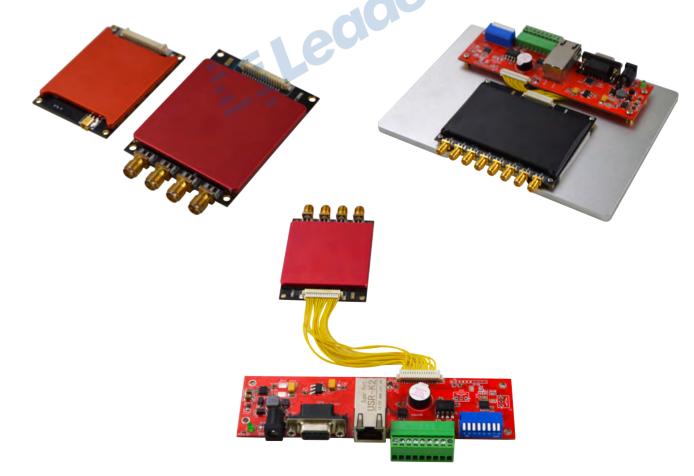
RealChip R-20C series products are a radio frequency module developed by our company based on the most advanced INDY R2000 radio frequency chip in the United States. Therefore, this product inherits the multi-label high-performance identification capability of INDY R2000 chip. It can be equipped with single-channel, four-channel or eight-channel inductive input, which is convenient to deal with a variety of Internet of Things application scenarios.



Power consumption parameters

Item No.	MCR-600	MCR-800	MCR-900
RF Channel	Single channel	Four channel	Eight channel
Connector	MMCX	SMA	SMA
Antenna Connection Mode	Single Antenna	Four Antenna	Eight Antenna
Interface Connector	Molex 53261-1571		
RF Connection Material	Gold-plated brass		
PCB Material	Rogers FR4 gold-plated		
Shield Material	Aluminum		

Physical Parameter	
Operating Voltage	3.7V-5V
Standby Mode Current	<50mA (EN high level)
Sleep Mode Current	<100mA (EN low level)
Operating Temperature	-10°C ~ +50°C
Output Power	0 – 33dBm
Receive Sensitivity	< -85 dBm
Peak Inventory Speed	> 700PCS/S
Label Buffer	@ 96 bit EPC
Tag RSSI	Supported
Antenna Detector	Supported
Ambient Temp Monitor	Supported
Working Mode	Single/DRM
Host Communication	TTL Uart port / TTL Uart
GPIO	2 inputs optical coupling, 2outputs optical coupling
Max Baud Rate	115200 bps
Heat Dissipation	External cooling fin



—31—