

# **RFID Technologies at Presidency University, Bangalore**



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UNIVERSITY**

Private University Estd. in Karnataka State by Act No. 41 of 2013




# RFID

- **RFID (Radio Frequency Identification)** is a technology that tracks and identifies tags attached to objects using wireless technology.
- Every RFID-secured library book will have RFID tag struck in the secret place.
- This tag interacts with the security gate sensors.
- Gates raises an alarm when anyone tries to steal a book.
- The security of Library resources can be made more effective.



# RFID tags

**Presidency University Library**  
Itgalpur, Rajanakunte, Yelahanka  
Bangalore - 560 064

GAIN MORE KNOWLEDGE  
REACH GREATER HEIGHTS

Please remember this resource is meant for many other users like you, so do not tamper, tear or damage the contents.

We believe that this is an individual social responsibility to take care of the library material.

Please do check before you borrow it as you may have to compensate as per the library rule, if the material is returned in a damaged condition.

Parameter	RRHFT01
<b>Supported Standards</b>	ISO 15693, ISO 18000-3
<b>Transponder IC</b>	I-Code SLI
<b>Operating Frequency</b>	13.56 MHz
<b>Transmission Principle</b>	ASK / FSK
<b>User Programmable Memory</b>	Upto 2048 Bits
<b>Data Retention</b>	40 Years
<b>Programming Cycles</b>	100000
<b>Operating Temperature</b>	-25°C to +70°C
<b>Storage Temperature</b>	-40°C to +85°C
<b>Dimensions</b>	Available in various dimensions and shapes



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# Readers



Parameter	RRHFLB03
Operating Frequency	13.56 MHz
Power Supply	USB Self Powered
Power Consumption	500 mW max
Transmitting Power	200 mW approx.
Read Range*	Up to 25 cm
Antenna	Internal
Communication Interface	USB (HID)
Supported Transponders	ISO 15693 and ISO 14443A
Indicators	Buzzer for read verification
Operating Temperature	0°C to +60°C
Dimensions	340 X 340 X 20 mm
Weight	Approx. 3 kg.
Housing Material	Corian Acrylic Polymer
Color	White



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# RFID Gate Antenna



**RRHFGA3 is a three pedestal antenna to cover wider area for reading of tags.**

Specifications	
Parameter	RRHFGA3
Operating Frequency	13.56 MHz
Power Supply	AC 230V / 50Hz
Power consumption	30W max
Transmitting Power	0.5W to 6W variable
Read Range*	Up to 1 m with pair of Gates
Communication Interface	RS-232 / Ethernet
Supported Transponders	ISO 15693
Operating Temperature	-10°C to +60°C
Communication Parameters	Baudrate: 115200 bps
Dimensions	1530 X 550 X 30 mm
Weight (1 Panel)	20kg
Housing Material	ABS



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# Self Check-In Check-Out Kiosk



**RRHFLB02 is a stand alone multi protocol self check-in check-out kiosk primarily for issue and return of books in Library**

Specifications	
Parameter	RRHFLB02
Operating Frequency	13.56 MHz
Power Supply	240 V AC 50Hz
Transmitting Power	200mW approx.
Read Range*	3 to 4 books of average size (Up to 250 mm)
Antenna Size	300 X 300 mm
Communication Interface	Ethernet
Supported Transponders	ISO 15693 and ISO 14443A
Operating Temperature	-10°C to +70°C
Dimensions	585 X 585 X 1475 mm
Weight	100 kg approx.
Display	17" LED touchscreen display



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# Book Drop Box



**RRHFBD01 is stand alone book return station primarily used for returning library books.**

## Specifications

Parameter	RRHFBD01
Operating Frequency	13.56 MHz
Power Supply	240 V AC 50Hz
Transmitting Power	200mW
Cart Size	Up to 150 books
Drop Method	One book at a time
Antenna Size	300 X 300 mm
Communication Interface	Ethernet
Supported Transponders	ISO 15693-3 ICODE
Operating Temperature	-10°C to +70°C
Dimensions	915 X 717 X 1664 mm
Weight	150 kg approx.
Display	17" LED touchscreen display



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# Handheld Reader



**RRHFHH3 is a high end handheld reader loaded with WIN CE platform for easy application development.**

Specifications	
Parameter	RRHFHH3
Operating Frequency	13.56 MHZ
Power Supply	5 V / 3 A DC Adapter
Antenna	Internal Antenna
Main Battery	Lithium Ion 3.7V, 2800mAh (Rechargeable)
CPU	CPU
Transmitting Power	Upto 1 W max.
Read Range	Up to 10cm*
Communication Interface	USB
Supported Transponders	ISO 18000-3 Mode 1
Indicators	Touchscreen Display, Buzzer
Operating Temperature	0°C to 40°C
Storage Memory	Expandable Upto 1 GB
Weight	500 gms approx.
Dimensions	500 gms approx.



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# Login Page

07/10/2019 09:31:10

UserName:

Password:

[Login](#) [Exit](#)

[Home](#) [Borrow](#) [Return](#) [Renew](#) [SyncTag](#) [Enquiries](#) [Tagging](#) [Card Reg](#)

# Home Page

07/10/2019 09:32:29

**BE SUCCESSFUL!**  
**BE INSPIRED!**

[Home](#) [Borrow](#) [Return](#) [Renew](#) [SyncTag](#) [Enquiries](#) [Tagging](#) [Card Reg](#)



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# Book Borrow

07/10/2019 09:33:33

Hello, SANTHOSH M B - [165]

Valid upto : 23-12-2099

Total loans : 7

Amount due : 0.0

Place book(s) to borrow

165

Transactions

Barcode	Item Detail	Date Due
---------	-------------	----------

Borrow Exit Clear

Home Borrow Return Renew SyncTag Enquiries Tagging Card Reg



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# Return

# Renew

07/10/2019 09:34:17

Hello, VIJAYAKUMAR S - [525]  
Valid upto : 01-11-2100  
Total loans : 1  
Amount due : 0.0

Press return button to return items

Transactions

Barcode	Item Detail	Date Due	Fine
4377	Basic and applied soil mechanics- Ranjan, Gopal; Rao, A S R, (Book)	16-08-2019	0.0

Return Exit Clear

Home Borrow Return Renew SyncTag Enquiries Tagging Card Reg

07/10/2019 09:34:43

Hello, SANTHOSH M B - [165]

Valid upto : 23-12-2099  
Total loans : 7  
Amount due : 0.0

Press renew to renew items.

165

Transactions

Barcode	Item Detail	Date Due	Fine
4377	Basic and applied soil mechanics- Ranjan, Gopal; Rao, A S R, (Book)		0.0

Renew Exit Clear

Home Borrow Return Renew SyncTag Enquiries Tagging Card Reg



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# Synchronize

# Enquiry

07/10/2019 09:35:12

Hello,  
Valid upto :  
Total loans :  
Amount due :

**Transactions**

Barcode	Item Detail	Date Due	Fine
4377	Basic and applied soil mechanics- Ranjan, Gopal, Rao, A S R, (Book) Available : set cas		0.0

Exit Clear

Home Borrow Return Renew SyncTag Enquiries Tagging Card Reg

07/10/2019 09:35:29

Hello, SANTHOSH M B - [165]  
Valid upto : 23-12-2099  
Total loans : 7  
Amount due : 0.0

165

**Transactions**

Barcode	Item Detail	Date Due	Fine
26127	Water supply engineering-, (Book)	10-07-2019	0.0
25020	Reinforced concrete design-, (Book)	10-07-2019	0.0
26200	Sewage disposal and air pollution engineering-, (Book)	10-07-2019	0.0
17210	Highway engineering-, (Book)	10-07-2019	0.0
4975	Surveying Vol. 1-, (Book)	10-07-2019	0.0

Barcode	Item Detail	Status	Pos
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Print Exit Clear

Home Borrow Return Renew SyncTag Enquiries Tagging Card Reg



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# Tag Show

# Tagging

07/10/2019 09:35:44



Barcode :   Force

Basic and applied soil mechanics- Ranjan, Gopal; Rao, A S R, (Book)  
Class - 624.15136 RAN, isbn - 9788122440393  
Publisher - New Age International Limited Publishers, Location - CVE  
Status - AvailableOnShelf

Tag found Type : ISO15693 Uid : E0040150618FD245

Show

Tag

Cancel

Exit

Home

Borrow

Return

Renew

SyncTag

Enquiries

Tagging

Card Reg

07/10/2019 09:36:12



Barcode :   Force

Choose your options.

Show

Tag

Cancel

Exit

Home

Borrow

Return

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