

# RFID HF Return unit 13,56 MHz



The RFID system is equipped with a device for self-returns of books which identifies volumes and sends a message about the transfer of a given item to the library account.

The device is made in an external version with a conveyor belt and a collar – it will be installed in the wall opening prepared by Purchaser.

The user communicates with the device using a touch screen, whose appearance and content of messages can be agreed and adapted to the needs of the library.



## Main features:

- the device, after checking and rejecting unauthorized returns, moves the books by the conveyor belt inside, where they fall into the transport cart with a self-tilting bottom,
- volumes inside RFID return machine are transfer out of patron account to the library account, at the same time there is a change of the protection status of the volume in the RFID label - the book is ready to be put back on the shelf and borrowed further after going through the device,
- library logo and other personalization on the display,
- at least three language versions of the interface available to be selected by the user: English, Russian, Estonian,
- the software of return machine shows the returns and monitors any irregularities,
- the device accepts items from the library's collection only, otherwise a proper message is displayed,
- supports bar code and RFID book labels,
- the device accepts returns - at the library's discretion, only authorized persons or anyone else,
- the patron may choose whether to print control receipt or not,
- RFID zone readers detect possible irregularities on returns and won't allow the book to be returned by mistake,
- remote monitoring the status of the device, incl . „book trolley full” message,
- checking the status of patron's accounts with the possibility of printing,
- optionally printing (on internal printer on the staff side) a list or single tickets for each book of returned items being on waiting list previously ordered in the LMS. Any printer incl. regular office one also a LAN printer can be configured.
- drop box is equipped with fire extinguishing device according to suitable regulations.

## Technical specification:

**The device consists of: a drop box, a collar, a conveyor belt and a cart with self-tilting bottom.**

- receipt printer : Custom S.P.A. VKP80III IDcode: 1852911, RoHS II. -20°C to +35°C IP54,
- item restriction: max W380mm; H90mm, min. W70mm;L70mm:H2mm,
- receipt printer: 80mm, -20°C to +35°C IP54,
- automatic closing of device input hole,
- chassis of device: stainless steel,  
vandal -proof device to be mounted in a wall opening.
- dimensions:height 760 mm x width 970 mm x depth 1100 mm(with the conveyor belt),
- the device can be mounted in a hole with dimensions: height 940 mm, width 1020 mm, on any height from the ground according to the library's choice. Also in a such way that the highest control is not higher than 1220 mm from the the ground,
- touchscreen SAW and monitor LCD 17-inch HB model 17-DOT, 450 cd/m2, -20°C to +35°C, RoHS.
- RFID book label reader Feig CPR74, RoHS - 2011/65/EC. -20°C to +35°C IP54,
- Bar code book label reader: Gryphon I GFS4100. Complies to EU RoHS. Operation: -20° C up to 50° C, IP54,

This device uses with the power grid connection (230V 50Hz 10A) and teleinformation network connection (RJ 45 – stable IP number). A license for the SIP2 protocol should be purchased from the library system provider. Due to continuous progress, we reserve the right to make changes and improvements.

## Cart with self – tilting bottom



The device uses a conveyor belt to move books inside the room, where they can fall into transport carts with a self-tilting bottom.

### Specification for carts with a self-tilting bottom:

- cart made of aluminum with a smooth and anodized surface,
- stable edge finish of the trolley with 3 mm thick special aluminum profile,
- movable bottom keeping books at the optimal height,
- adjustable spring force up to 50 kg,
- internal dimensions: width 740 mm x depth 500 mm x 480 mm high,
- external dimensions: width 870 mm x depth 560 mm x height 780 mm,
- capacity: 180 l,
- the bottom of the trolley is fitted with a lining to protect the books from damage,
- swivel castors with a diameter of 125 mm, solid rubber, with a brake on two wheels.

**Standards:** ISO / IEC 15693, ISO / IEC 18000-3, EN 300330, ISO 28560-2, ISO 14443. CE, RoHS.

**Current operating system:** Windows 10 IoT Ent 2019 MultiLang. Supports encoding UTF-8.

Arfido reserves the right to change due to continued technical progress. The photos show an example of the device and dimensions, equipment and other parameters may vary.

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