Technical certificate/Manual

Desktop Book Issuing/Card Reading Device UniBook Shielded Book HF

UniBook

Trademark: UniBook
Country of manufacture: Russia

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1. BASIC DETAILS ON THE PRODUCT AND TECHNICAL SPECIFICATIONS

1.1 PURPOSE OF THE PRODUCT

Desktop Book Issuing/Card Reading Device UniBook Shielded Book is a part of the RFID system used to automate book checkout in libraries.

1.2 SPECIFICATIONS

Specifications of the antenna.

General specifications	
Casing	Wear-proof plastic, metal
Dimensions	360 x 280 x 20 mm
Weight	1,200 g
Protection index	IP40
Color	Black, grey
Electrical parameters	
Supported tags standard	ISO 14433
Max. transmission power	1 W
Operating frequency	13.56 MHz
Antenna connection	SMA connector (50 Ω)
Cable	G174 type, 50 Ω, 2 m in length
Operating conditions	
Working temperature	0 to + 55 ° C
Storage temperature	-25 °C to +85 °C
Standards	
Electromagnetic compatibility	EN 300 683
Safety	
Europe	EN 60950

Maintenance and care

· Do not store or use the equipment in a dusty or humid place, use a soft cloth to remove dirt;

· Do not store equipment in cold places. When the temperature gets back to normal, condensation may form on electronic parts, which can damage the electronic circuit boards;

· Do not try to open the device yourself outside the installation and maintenance process. Unprofessional handling may damage the antenna. Handle the device carefully. Shocks may damage electronic circuit boards;

· Do not paint the device. Paint containing metal particles may limit the range of the antenna.

1.3 DESIGN AND PRINCIPLE OF OPERATION

When a book with an RFID tag approaches EasyBook Universal Self Checkout/Tag Programming Station (station) within a reading distance, the tag enters the electromagnetic field of the station and the tag signal is transmitted to the reader connected via a com port to the station's antenna. The station detects and identifies the tag ID number and display all the details of the item in editable format. The status locked or unlocked can be settled from the station in real time. The station with a tablet antenna and a reader is powered by a 220 V network. The station with its integrated software is fully compatible with the other parts of the RFID system.

1.4 INDICATION OF SAFETY MEASURES

The device may only be used for the purpose recommended by the manufacturer. Unauthorized changes and the use of spare parts and accessories that were not recommended by the manufacturer may cause fire, electric shock, or damage. Such conduct excludes manufacturer responsibility. Installation, maintenance and repair should only be carried out by qualified personnel. The use of the device must be carried out in accordance with Russian standards and regulations regarding the use of electronic devices. Special information for people with pacemakers and other cardiac stimulators: Although the equipment fully complies with all standards for electronic devices, it is recommended that a minimum distance of 25 cm be kept between the equipment and pacemaker.

1.5 OPERATING CONDITIONS.

1.5.1. Operating voltage (from a stabilized AC adapter): 12V. (1A).

1.5.2. Operating temperature range: Operating temperature 0 °C to + 55 °C Storage temperature -25 °C to +85 °C

Terminal	Description
X4	Connection of an external antenna (input operating impedance is 50 Ω)

Note:

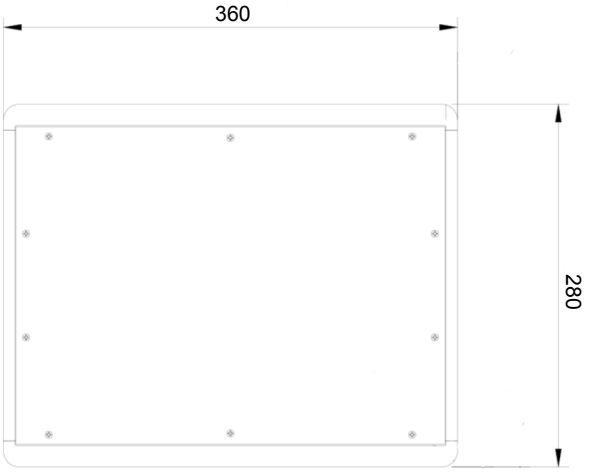
• The input impedance of the antenna should be 50 Ω ± (3 Ω ∠ 3 °);

• The optimal working Q-factor of the antenna should be in the range QB = 10... 20. To determine the operating Q-factor, the antenna must be supplied with a 50 Ohm source, such as a network analyzer or a frequency generator;

• When connecting the antenna, make sure that its parameters are within the ranges of the applicable your standards for radio-electronic devices.

Mounting.

The antenna is intended for indoor use on the desktop.



All distances are given in millimeters.

The reader shall be located at least 0.5 meters from other RFID equipment.

Can be installed under no metallic surfaces.

Important warning: *Do not place the antenna on a metal surface; keep a minimum distance of 2 cm. The reading range may drop significantly at a distance of less than 10 cm.*