



Logistic Tray L2-U User Manual Rev. 3.0

Model: Logistic Tray L2-U





# **Table of Content**

FCC statement	3
CE statement	3
Chapter 1 Introduction of Logistic Tray L2-U	4
1.1 Overview of Logistic Tray L2-U	4
1.2 Ports Description	5
1.3 Indicators LEDs in Logistic Tray L2-U	5
1.4 Antenna for Logistic Tray L2-U	
1.5 Specification:	8
Chapter 2 Installation of Logistic Tray L2-U	9
2.1 Start-up Procedures of Logistic Tray L2-U	9
2.2 Environmental Requirements	
2.3 Caution	11
Chapter 3 Demonstration of RFID Applications	112
3.1 Creating RFID Application with Logistic Tray L2-U.	12 <u>2</u>
3.1.1 Delivering Application to Logistic Tray L2-U	12 <u>2</u>
3.1.2 Programming Language compatibility	12
Chapter 4 Regulatory Information	13
4.1 Federal Communications Commission (FCC) Comp	liance 13
4.1.1 Radio Frequency Radiation Exposure	14
4.2 CE Com`pliance	14
Chapter 5 Disclaimer Notice	1615
Chapter 6 Warranty	16
Chapter 7 Support	17



## **FCC** statement

#### FCC NOTICE:

To comply with FCC part 15 rules in the United States, the system must be professionally installed to ensure compliance with the Part 15 certification. It is the responsibility of the operator and professional installer to ensure that only certified systems are deployed in the United States.

The use of the system in any other combination (such as co-located antennas transmitting the same information) is expressly forbidden.

### **CE** statement

#### CE NOTICE:

The CE Mark applies to products regulated by certain European health, safety and environmental protection legislation. The CE Mark is obligatory for products it applies to: the manufacturer affixes the marking in order to be allowed to sell his product in the European market.



### **Chapter 1 Introduction of Logistic Tray L2-U**

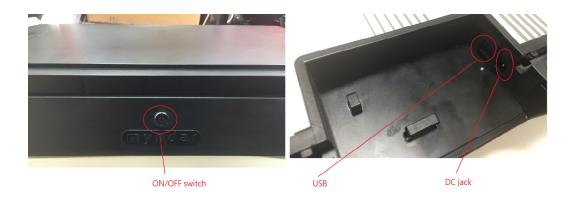
### 1.1 Overview of Logistic Tray L2-U:

Logistic Tray is an UHF EPC C1G2 RFID fixed reader, it is embedded with strong near field antenna and only read tag on the tray, minimize the false reading issue.

 The Logistic Tray L2-U Intelligent RFID Reader supports protocols, UHF CLASS 1 GEN2 EPC C1G2/ISO 18000-6C, 902-928 MHz RFID frequency band in United States.



## **1.2 Ports Description**



The Logistic Tray L2-U has several types of input/output port:

Items no.	Name	Description
1	DC jack	6.5V/3A dc power supply input
2	USB port	One standard USB port
3	On_OFF switch	One switch on and off button



## 1.3 Indicators LEDs in Logistic Tray L2-U





The Logistic Tray L2-U has different LEDs to indicate the reader status.

Items no.	Name	Description
4	Red LED	Powered On but USB not connect
5	Blue LED	Powered On and USB Connected



## 1.4 Antenna for Logistic Tray L2-U

There are two identical antennas are used with Logistic Tray L2-U. The following antennas are used for Logistic Tray L2-U:

#### RFID NEAR FIELD FLAT PANEL ANTENNA: antenna gain = 0dBi





## 1.5 Specification:

Item	Specification		
lanut	1 power key button		
Input	1 USB port		
Indicator	<ul> <li>Red LED indicate for Powered On but USB not connected</li> <li>Blue LED indicate for Powered On and USB Connected</li> </ul>		
Connectivity	USB2.0		
Chargor	6.5V 3A ac to dc power adapter		
Charger	DC jack with inner post of "+ve" and outer post of "-ve"		
Operation temp.	0 to +40 deg C		
Storage temp.	-20 to +60 deg C		
Operating Humidity	20% to 90%		
Features	<ul> <li>1 Watt (30dBm) Tx output levels</li> <li>Adjustable output Tx power levels over +5 to 30dBm range in 1dB steps,</li> <li>High durability in harsh environments,</li> <li>Easy installation and maintenance,</li> <li>All-in-one compact design,</li> <li>Fanless Design for protection of dirt, dust, insects, liquids,</li> <li>Supporting tag interface of EPC C1G2/ISO 18000-6C(UHF C1G2),</li> <li>Dense Reader Mode Capability</li> </ul>		



## **Chapter 2 Installation of Logistic Tray L2-U**

### 2.1 Start-up Procedure of Logistic Tray L2-U

This section explains how to set-up Logistic Tray L2-U and connect the Logistic Tray L2-U to your computer and antenna:

- I. Plug in the power adapter.
- **II.** Power on the L2-U by switching the Power on button. Then, the Red LED will be turned on.







**III.** Plug in the USB to the tray and connect the USB with the computer. Then, the Blue LED will be turned on.



- IV. Select the test tools or apps for application.
- V. Logistic Tray L2-U operates at UHF frequency band, FCC 902-928 MHz, SRRC 920-925 MHz and NCC 922-928 MHz); the setting depends on countries' regulations.

#### 2.2 Environmental Requirements

The next table includes environmental requirements for the Logistic Tray L2-U. Choose a location that meets these requirements.

Description	Minimum	Maximum
Operating temperature	0ºC	40°C
Storage temperature	-20°C	60ºC
Humidity (non-condensing)	20%	90%



#### 2.3 Caution

#### Danger of Electric Shock

- Disconnect the device from the electric supply before cleaning or performing maintenance on the machine.
- · Keep this device dry.
- Turn off or unplug the machine when it is not in use.

Please read the information contained within this user manual prior to attempting installation and operation of the RFID Reader. Failure to install and operate the RFID Terminal (Logistic Tray L2-U) in accordance with the information contained in this manual may result in unsatisfactory performance.



## **Chapter 3 Demonstration of RFID Applications**

#### 3.1 Creating RFID Application with Logistic Tray L2-U

Logistic Tray L2-U is an intelligent reader and compliance with EPC global C1G2/ISO 18000-6C, Users can develop own UHF RFID application on this platform.

#### 3.1.1 Delivering Application to Logistic Tray L2-U

When the user wants to deliver applications to the Logistic Tray L2-U, they just simply install the program in Windows and Linux platform.

#### 3.1.2 Programming Language compatibility

Users may use several types of programming language, for examples, C++, C#.NET, Java and Java script.



### **Chapter 4 Regulatory Information**

4.1 Federal Communications Commission (FCC) Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

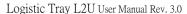
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING: DO NOT ATTEMPT TO SERVICE THE WIRELESS COMMUNICATION DEVICE YOURSELF. SUCH ACTION MAY VOID THE WARRANTY. THE LOGISTIC TRAY L2-U IS FACTORY TUNED. NO CUSTOMER CALIBRATION OR TUNING IS REQUIRED. CONTACT MEGABYTE LTD. TECHNICAL SUPPORT FOR INFORMATION ABOUT SERVICING YOUR WIRELESS COMMUNICATION DEVICE.

#### Note:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



Updated on 7NOV 2016

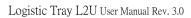


This device must be used in fixed locations and in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons. This device must not be co-located or operating in conjunction with any other antenna or transmitter

#### **4.2** CE Compliance

This device has been tested to and conforms to the regulatory requirements of the European Union and has attained CE Marking. The CE Mark is a conformity marking consisting of the letters "CE". The CE Mark applies to products regulated by certain European health, safety and environmental protection legislation. The CE Mark is obligatory for products it applies to: the manufacturer affixes the marking in order to be allowed to sell his product in the European market.

The CE Marking is not a quality-mark. Foremost, it refers to the safety rather than to the quality of a product. Secondly, CE Marking is mandatory for the product it applies to, whereas most quality markings are voluntary.







### **Chapter 5 Disclaimer Notice**

#### **Disclaimer Notice**

The manufacturer shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this material. This document contains proprietary information, which is protected by international patent applications and copyright. All rights reserved. No part of this document may be copied, reproduced or translated without prior written consent of the manufacturer. The manufacturer reserves the right to revise this publication and to make changes from time to time in the contents hereof without obligation to notify any person of such revisions or changes. The manufacturer also reserves the right to change the specifications without notice.



### **Chapter 6 Warranty**

- Megabyte Ltd warrants to the User that the Products sold to the User will comply with their
  published specifications and will be of satisfactory quality and that Megabyte Ltd is entitled
  to sell the Products to the User. Megabyte Ltd warrants that for a period of twelve (12)
  months from date of purchase ("the Warranty Period"), the products will be free from defects
  in materials and workmanship.
- 2. During the Warranty Period, Megabyte Ltd will repair, or if in Megabyte Ltd's opinion necessary replace, the defective product returned to Megabyte Ltd's head office in Hong Kong. The defective production must be returned in its original packaging and all shipping and handling charges shall be borne by the Users.
- 3. The Warranty Period shall not be extended by reason of any repair or replacement.
- 4. Megabyte Ltd shall have no liability to the User for any damage to or defects in any of the Products caused by fair wear and tear, improper use, negligent handling, failure to observe this User Manual and the instructions accompanying the Products or any alterations maintenance or repair to the Products by any person other than Megabyte Ltd, use of non-Megabyte Ltd parts, accessories or equipment, or third party software which would damage the Products.
- 5. Unless in the case of any damage to or defect in the Products which would have been apparent on reasonable visual inspection, the User notifies Megabyte Ltd of the same in writing within 7 days after the date of purchase thereof, or in the case of any damage to or defects in the Products which would not have been apparent on reasonable visual inspection the User notifies Megabyte Ltd of the same in writing 7 days after the defect becomes apparent to the User, the User shall not be entitled to reject the Products concerned.
- The User shall be responsible for properly storing and making backup copies of all data
  which may be stored in the Products. Megabyte Ltd shall not be responsible for any lost of
  data as a result of any repair or replacement.
- 7. Except as expressly provided in this User Manual no warranty, condition, undertaking, or term, express or implied, statutory or otherwise, as to the condition, quality, performance, durability or fitness for purpose of the Products is given or assumed by Megabyte Ltd and all such warranties, conditions, undertakings and terms are hereby excluded to the fullest extent permitted by law.



## **Chapter 7 Support**

Technical support/Sales Enquiry can be obtained from Megabyte Ltd.

Please email to: jimmywong@myndar.com