EBC-05M1

5.65" E-Ink Bedside Card

Quick Reference Guide

2nd Ed – 21 December 2018

Part No. E2017EB05A1R

FCC Statement

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

• This device may not cause harmful interference.

• This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the Federal Communications Commission (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 causes 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 doing 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.

A Message to the Customer

Avalue Customer Services

Each and every Avalue's product is built to the most exacting specifications to ensure reliable performance in the harsh and demanding conditions typical of industrial environments. Whether your new Avalue device is destined for the laboratory or the factory floor, you can be assured that your product will provide the reliability and ease of operation for which the name Avalue has come to be known.

Your satisfaction is our primary concern. Here is a guide to Avalue's customer services. To ensure you get the full benefit of our services, please follow the instructions below carefully.

Technical Support

We want you to get the maximum performance from your products. So if you run into technical difficulties, we are here to help. For the most frequently asked questions, you can easily find answers in your product documentation. These answers are normally a lot more detailed than the ones we can give over the phone. So please consult the user's manual first.

To receive the latest version of the user's manual; please visit our Web site at:

http://www.avalue.com.tw/

Instructions for the User

The document combines text and illustrations, providing a comprehensive overview of the system. This document is written for technicians, system administrators, authorized service providers, and users who have limited computer experience.

Purposes and Applications

EBC-05M1 is an IOT enabled wireless display card designed to replace traditional paper-based display card. EBC-05M1 provides real-time information, e.g., names, reminder, and basic information. It improves the efficiency to provide professional and reliable service in a more eco way.

Reference Structure

EBC-05M1 communicates with router via sub-GHz frequency. Suggested distance between EBC-05M1 and the router is 100m maximum.
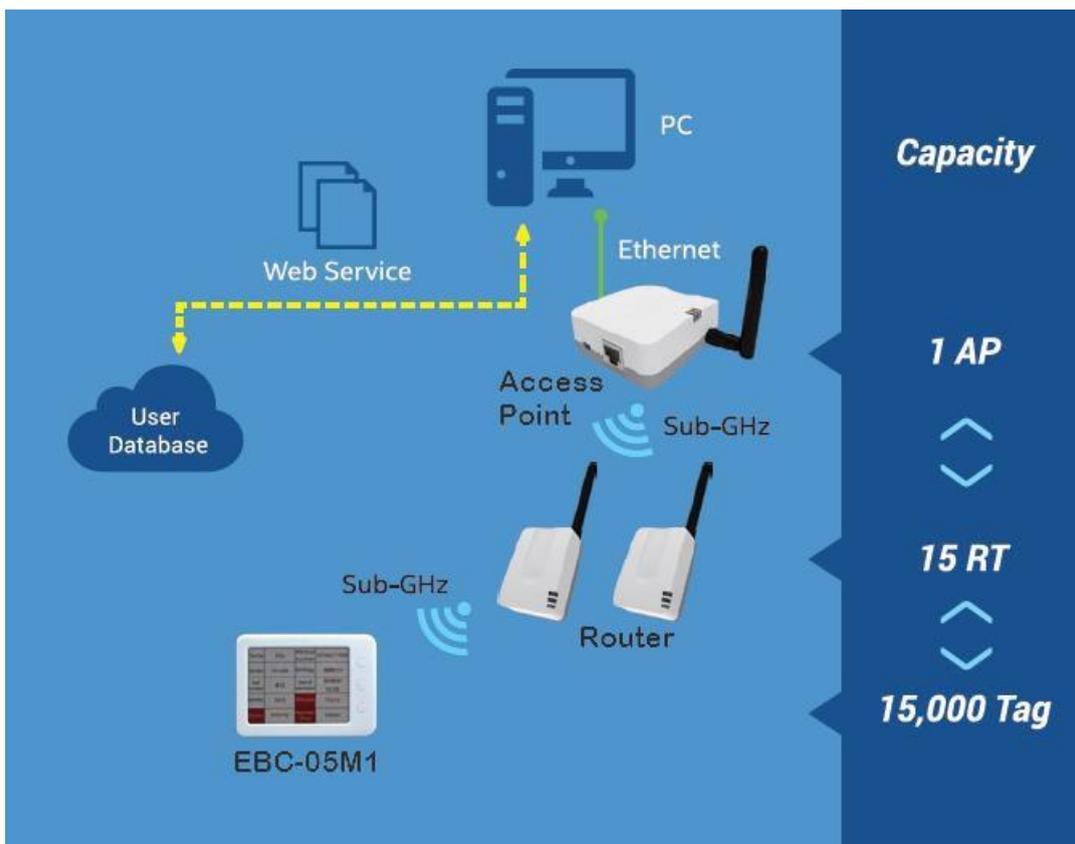
Content

1. Getting Started

1.1 Safety Precautions

Warning!

Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

Caution!

Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

BATTERY WARNING:
- Do not mix old and new batteries.
- Do not mix alkaline, standard or rechargeable batteries.
- Remove batteries when product is stored for a long period of time or when batteries are exhausted.
- Dispose of exhausted batteries properly.
- Non-rechargeable batteries are not to be recharged.
- Rechargeable batteries are to be removed from the device before being charged.
- Only the recommended batteries or equivalent are to be used, volts and size.
- Keep all batteries away from children.
- Batteries are to be inserted with correct polarity. Please follow the instruction in the manual to install.

國家通訊傳播委員會(NCC)警告: 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅 自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻電機之使用不 得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善 至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通 信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設 備之干擾(最基本的，低功率電波輻射性電機管理辦理第 12 及 14 條).
(Note: This caution is based on Taiwan National Communications Commission regulation and is stated for users in Taiwan.)

FCC Caution
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement:
This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

1.2 Packing List

- 5 x EBM-05M1

If any of the above items is damaged or missing, contact your retailer.

1.3 System Specifications

Component	
Mother Board	EBC-05M1
CPU	ARM Cortex-M MCU
Power Supply	Operating with 4 x AAAA batteries
Wireless	Sub-GHz communication
Panel	
Panel	5.65" E-ink ED057TC6
Pixels	600 x 448
Display Colors	Black and White with Highlight Red
Touch Screen	Cover Lens only
External I/O	
Wireless Antenna	Onboard PCB
Mechanical	
Power Type	4 x AAAA batteries
Power Connector Type	Battery spring
Dimension	160 x 113 x 15 mm
Color	White
Fanless	Fanless
Reliability	
EMI Test	NCC & FCC Class B
Safety	Avalue Standard Test Criteria
Dust and Rain Test	Front Panel IPX1
Vibration Test	1Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 30min/axis
Mechanical Shock Test	10Grms, IEC 60068-2-27, Half Sine, 11ms
Drop Test	EC-60068-2-32 (96.5cm)
Operating Temperature	0 ~ 40 C
Operating Humidity	5% ~ 90% relative humidity, non-condensing
Storage Temperature	-20 ~ 60 C

Note:

Specifications are subject to change without notice.

EBC-05M1

1.4 System Dimensions

14.95±0.3

159±0.5

113±0.5
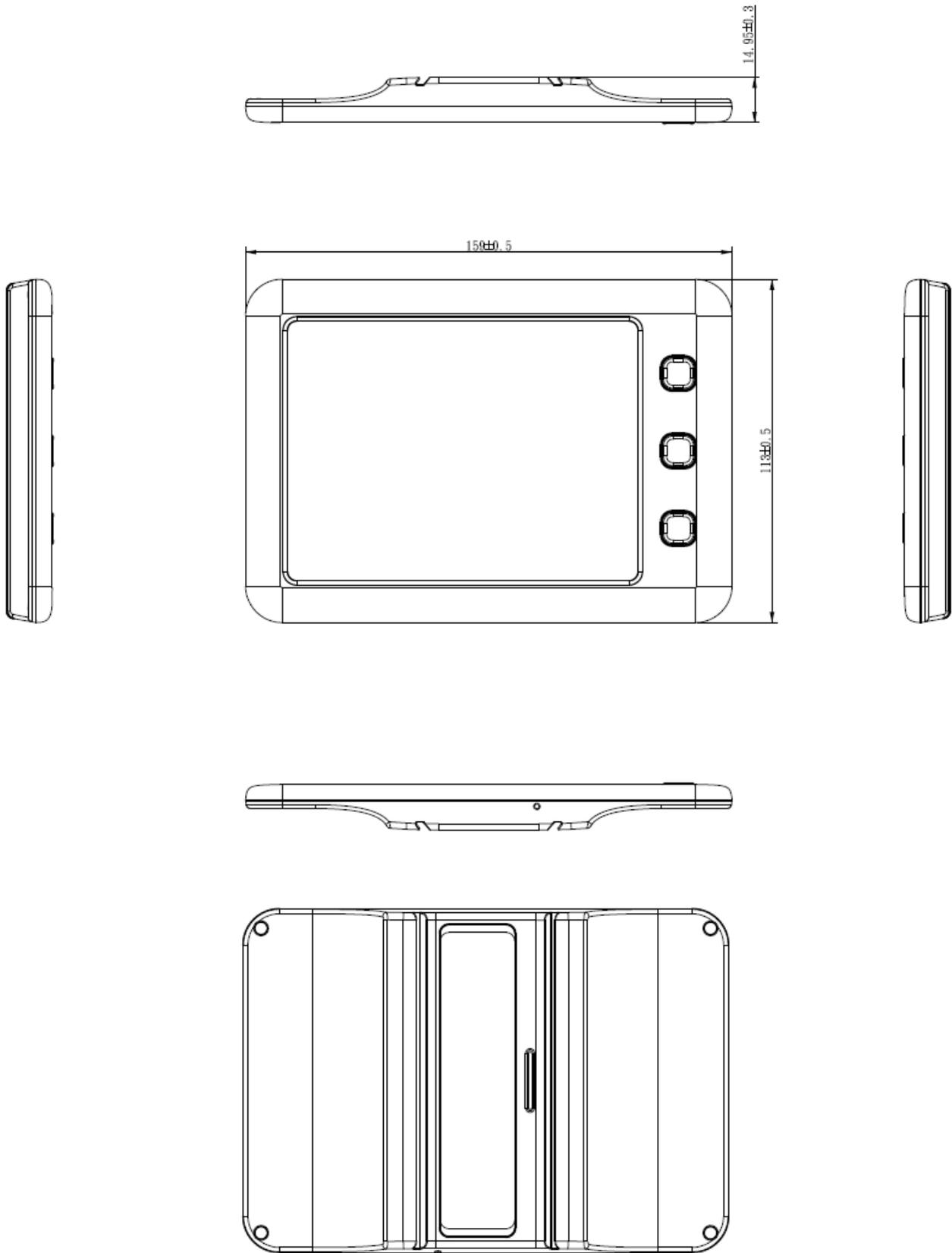
(Unit: mm)

2. Hardware Configuration

Note: If you need more information, please visit our website:

http://www.avalue.com.tw

2.1 Installing Batteries
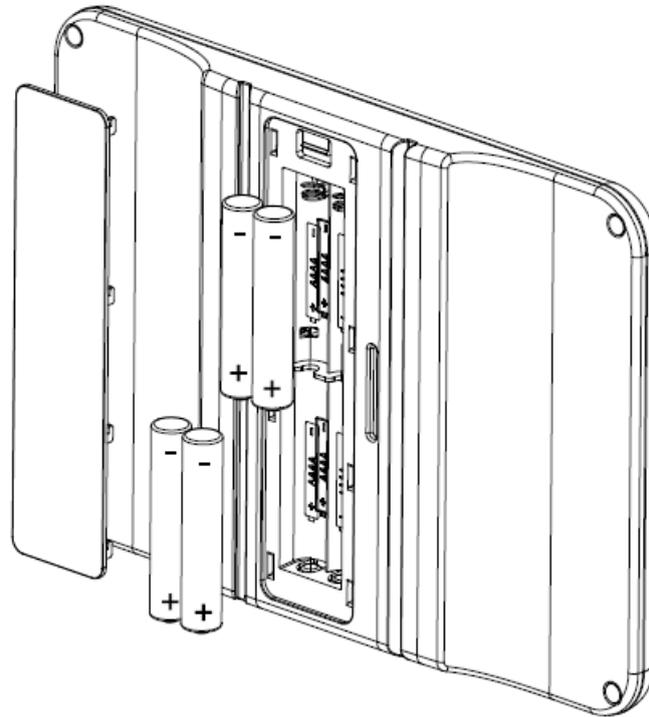
Step1. Remove the battery cover.

Step2. Press the battery spring, when removing batteries or replacing new one.

Step3. Re-assemble your system back through previous steps to complete the installation.