

**ONYX-1022**

10.1" LCD with LED Backlight  
Intel® Celeron J1900 Quad Core Processor  
Slim Medical Panel PC

ONYX-1022 Manual 1st Ed  
Mar., 2016

## Copyright Notice

This document is copyrighted, 2016. All rights are reserved. The original manufacturer reserves the right to make improvements to the products described in this manual at any time without notice.

No part of this manual may be reproduced, copied, translated, or transmitted in any form or by any means without the prior written permission of the original manufacturer. Information provided in this manual is intended to be accurate and reliable. However, the original manufacturer assumes no responsibility for its use, nor for any infringements upon the rights of third parties, which may result from its use.

The material in this document is for product information only and is subject to change without notice. While reasonable efforts have been made in the preparation of this document to assure its accuracy, ONYX Healthcare Inc., assumes no liabilities resulting from errors or omissions in this document, or from the use of the information contained herein

ONYX Healthcare Inc. reserves the right to make changes in the product design without notice to its users

## Acknowledgments

---

- Intel® Celeron™ is registered trademarks of Intel® Corporation.
- Microsoft® Windows is a registered trademark of Microsoft® Corporation.

All other product names or trademarks are properties of their respective owners.

## Packing List

---

Before you begin installing your Slim Medical Panel PC, please make sure that the following items have been shipped:

- ONYX-1022 Slim Medical Panel PC
- Utility DVD-ROM, which contains Drivers and Utilities
- Four VESA Screws(M:4mm x P:0.7mm x L:10mm)
- Medical Power Adapter 60W/12VDC

If any of these items are missing or damaged, you should contact your distributor or sales representative immediately.

**Headquarters**

Onyx Healthcare Inc.

2F, No.135, Lane 235, Pao-Chiao Rd.,

Hsin-Tien City, Taipei 231, Taiwan, R.O.C.

TEL: +886-2-8919-2188

FAX: +886-2-8919-1699

E-mail: [sales@onyx-healthcare.com](mailto:sales@onyx-healthcare.com)

<http://www.onyx-healthcare.com>

**Worldwide Offices:**

Onyx Healthcare Inc.

2F., No.135, Ln. 235, Baoqiao Rd., Xindian Dist.,

New Taipei City 231, Taiwan (R.O.C.)

TEL: +886-2-8919-2188

FAX: +886-2-8919-1699

E-mail: [sales@onyx-healthcare.com](mailto:sales@onyx-healthcare.com)

<http://www.onyx-healthcare.com>

**Worldwide Offices:**

Onyx Healthcare, USA Inc.

324W. Blueridge Ave., Orange,, CA 92865, USA

Tel : +1-714-792-0774

Fax: +1-714-792-0481

Email: [usasales@onyx-healthcare.com](mailto:usasales@onyx-healthcare.com)

Onyx Healthcare EUROPE B.V.

Primulalaan 42, 5582 GL Waalre, Netherlands

Tel : +31-(0)499-745600

Email: [eusales@onyx-healthcare.com](mailto:eusales@onyx-healthcare.com)

Onyx Healthcare (Shanghai) INC.

20F, unit D, GEM Building, No. 487 Tianlin Road,

Shanghai, China

Tel: +86-021-64956588

Fax: +86-021-64956889

Email: [cnsales@onyx-healthcare.com](mailto:cnsales@onyx-healthcare.com)

## Safety & Warranty

---

1. Read these safety instructions carefully.
2. Keep this user's manual for later reference.
3. Disconnect this equipment from any AC outlet before cleaning.  
Do not use liquid or spray detergents for cleaning. Use a damp cloth.
4. For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.
5. Keep this equipment away from humidity.
6. Put this equipment on a reliable surface during installation.  
Dropping it or letting it fall could cause damage.
7. The openings on the enclosure are for air convection. Protect the equipment from overheating. DO NOT COVER THE OPENINGS.
8. **Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.**
9. **Warning: To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective earth. (Avertissement: Pour éviter tout risque de choc électrique, cet appareil doit être connecté à une alimentation secteur avec une prise de terre)**
10. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
11. All cautions and warnings on the equipment should be noted.

12. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.
13. Never pour any liquid into an opening. This could cause fire or electrical shock.
14. **Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.**
15. **Warning: Do not modify this equipment without authorization of the manufacturer. (Avertissement: Ne pas modifier cet équipement sans l'autorisation du fabricant)**
16. **Warning : It is necessary for checking or replacing the battery pack every year. (Avertissement: Il est nécessaire de vérifier ou de remplacer la batterie chaque année)**



- 16. If any of the following situations arises, get the equipment checked by service personnel:**
- The power cord or plug is damaged.
  - Liquid has penetrated into the equipment.
  - The equipment has been exposed to moisture.
  - The equipment does not work well, or you cannot get it to work according to the users manual.
  - The equipment has been dropped and damaged.
  - The equipment has obvious signs of breakage.
- 17. DO NOT LEAVE THIS EQUIPMENT IN AN UNCONTROLLED ENVIRONMENT WHERE THE STORAGE TEMPERATURE IS BELOW -20° C (-4°F) OR ABOVE 60° C (140° F). IT MAY DAMAGE THE EQUIPMENT.**
- 18. External equipment intended for connection to signal input/output or other connectors, shall comply with relevant UL / IEC standard (e.g. UL 1950 for IT equipment and ANSI/AAMI ES 60601-1: 2005 AND CAN/CSA-C22.2 No. 60601-1:08 / IEC 60601 series for systems – shall comply with the standard IEC 60601-1-1, Safety requirements for medical electrical systems. Equipment not complying with UL 60601-1 shall be kept outside the patient environment, as defined in the standard.**

*Caution:*

*It may cause the danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer.*

## Classification

---

1. Degree of protection against electric shock: not classified
2. Degree of protection against the ingress of water: IPX0
3. Mode of operation: Continuous
4. Type of protection against electric shock: Class I equipment
5. No Applied Part, No AP/APG

## FCC

---

### *Warning!*



This device complies with Part 18 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.

## UL Module Description

---







*ONYX-1022 module is developed to suitable for the Classification Mark requirement*

## Safety Symbol Description

---

The following safety symbols are the further explanations for your reference.

	<i>Medical equipment with respect to electric shock, fire and mechanical hazards only in accordance with <b>ANSI/AAMI ES 60601-1:2005 AND CAN/CSA-C22.2 No. 60601-1:08</b></i>
	<i>Attention, consult ACCOMPANYING DOCUMENTS.</i>
	<i>Stand-by</i>
	<i>Ground wire Protective Ground wire.</i>

## Contents

<b>Chapter 1 General Information.....</b>	<b>P15</b>
1.1 Introduction.....	P16
1.2 Feature .....	P17
1.3 Specification .....	P18
1.4 Dimension .....	P22
<b>Chapter 2 Hardware Installation.....</b>	<b>P23</b>
2.1 Safety Precautions .....	P24
2.2 Quick Tour of ONYX-1022.....	P25
2.3 Mounting.....	P29
2.4 Turn On and Boot up into Windows.....	P29
2.5 Turn off.....	P29
<b>Chapter 3 Driver Installation.....</b>	<b>P31</b>
<b>Appendix A Miscellanea.....</b>	<b>P33</b>
A.1 General Cleaning Tips.....	P34
A.2 Cleaning Tools .....	P35
A.3 Scrap Computer Recycling .....	P37

Chapter

1

**General  
Information**

## 1.1 Introduction

---

ONYX-1022 Slim Medical Panel PC is based on Intel® Celeron™ J1900 Quad Core processor, which delivers a performance improvement of more than 100 percent compared to systems running traditional single-core processors. With four cores computing engines, ONYX-1022 can simultaneously execute four computing tasks. It accommodates one half size mSATA SSD and one DDRIII SODIMM up to 8GB.

The high brightness LCD, zero noise solution, integrated multimedia functions make them the perfect platform upon which to build comprehensive lifestyle computing applications.

ONYX-1022 includes all the features of a powerful computer into a slim and attractive chassis. It has a 10.1" 300 nits TFT display with 1280 x 800 resolution. ONYX-1022 owns a smart card reader to support ID check. Combining ONYX-1022 into your system can achieve both cost-saving and efficient improvements in common medical applications. ONYX-1022 is definitely your perfect choice.



## 1.2 Feature

---

- Intel® Celeron™ J1900 Quad Core Processor
- Supports One DDR3 SODIMM up to 8GB
- Built-in RFID Reader(optional) and Smart Card Reader (optional)
- 5 Function Keys in the Front Panel

## 1.3 Specification

### Hardware Specifications

<b>Display</b>	10.1" 1280 x 800 LCD
<b>CPU</b>	Intel® Celeron™ J1900 Quad Core 2.42GHz Processor
<b>System Memory</b>	One DDR3 SODIMM up to 8GB
<b>Disk Drive Space</b>	Half Size mSATA Solid State Drive
<b>Expansion</b>	Mini Card x1
<b>Function Key</b>	Power On/Off, Speaker Volume Up/Down, LCD Brightness Up/Down
<b>I/O</b>	1x RS-232 port 1x USB 3.0 port 3x USB 2.0 port 2x Gigabit LAN <i>Sound:</i> 1 x Mic

### LCD Specifications

<b>Display Type</b>	10.1" LCD
<b>Max. Resolution</b>	1280 x 800
<b>Contrast Ratio</b>	1300:1
<b>Luminance (cd/m<sup>2</sup>)</b>	300(TYP)
<b>Back Light Life Time</b>	>25,000 Hrs

**Note:**

All ONYX LCD products are manufactured with High precision technology. However, there are a small number of defective pixels in all LCD panels that are not able to change color. This is a normal occurrence for all LCD displays from all manufacturers and should not be noticeable or objectionable under normal operation. All LCD panels are qualified for industry standard conditions in the following: total 7 dead pixels on a screen or if there are 3 within 1 inch square area of each other on the display.

**Mechanical Specifications**

<b>Architecture</b>	Close-frame
<b>Front Bezel</b>	Plastic bezel with resistive touch screen
<b>Color</b>	White
<b>Mounting / Holder</b>	VESA 75/100mm, Screw type:M4*8mm
<b>Construction</b>	3mm ABS + PC TYPE Plastic housing
<b>Dimension (WxHxD)</b>	262.4mmx 191.1mm x 45.0 mm
<b>Net Weight</b>	2.6 lb (1.2 Kg)

**Power Supply Specifications**

<b>Model</b>	Adapter ATM065-P120
<b>Input Voltage</b>	100-240V AC @ 50-60 Hz
<b>Output Voltage</b>	12V, 5A, 60W max.

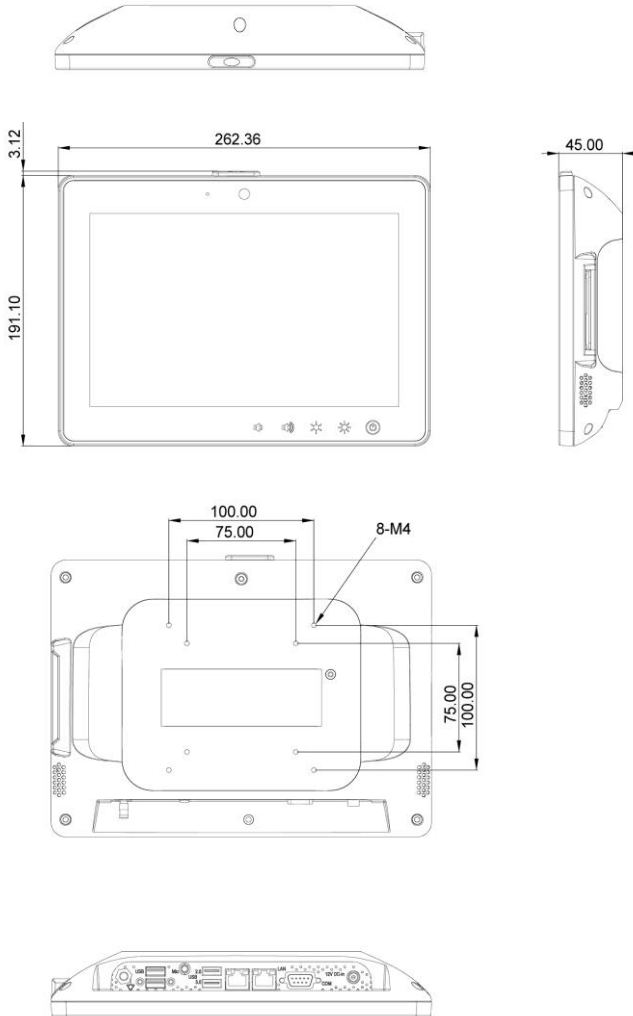
## Environmental Specifications

<b>Operating Temperature</b>	0°C to 40°C (32°F ~104°F)
<b>Operating Humidity</b>	30% to 75% RH, non-condensing
<b>Operating Pressure</b>	700 to 1033 hPa
<b>Storage Temperature</b>	-20°C to 60°C (-4°F ~140°F)
<b>Storage Humidity</b>	10% to 90% RH, non-condensing
<b>Storage Pressure</b>	700 to 1033 hPa
<b>Vibration</b>	0.5G / 5 ~ 500Hz (Random) / operation
<b>Shock</b>	20G peak acceleration (11 msec. duration) / operation
<b>Drop(with packaging)</b>	76cm (1 Corner, 3 Edge, 6 Surface)
<b>EMI / Safety</b>	CE / FCC Class B/ANSI AAMI ES60601-1/ EN 60601-1

## Touch Screen

<b>Type</b>	Projective Capacitive / 5-wire Resistive
<b>Interface</b>	USB interface
<b>Light Transmission</b>	> 75%

## 1.4 Dimension



Chapter

2

# Hardware Installation

## 2.1 Safety Precautions

---

**Warning!**

*Always completely disconnect the power cord from your board whenever you are working on it. Do not make connections while the power is on, because a sudden rush of power can damage sensitive electronic components.*

**Caution!**

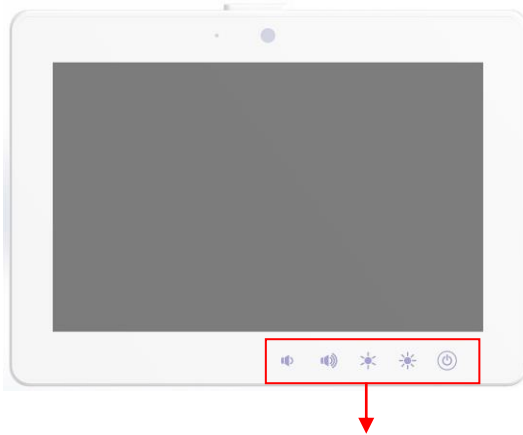
*Always ground yourself to remove any static charge before touching the board. Modern electronic devices are very sensitive to static electric charges. Use a grounding wrist strap at all times. Place all electronic components on a static-dissipative surface or in a static-shielded bag when they are not in the chassis*



## 2.2 Quick Tour of ONYX-1022






---

There are 5 control buttons in the front side of ONYX-1022. Please refer to table 2.1 for the function of each button.



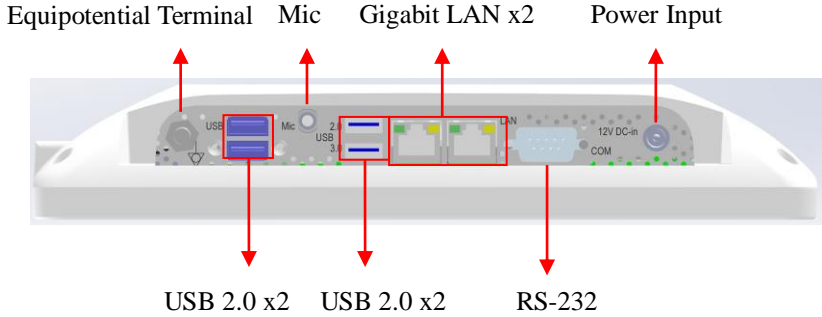
Control Buttons

*Picture 2.1: Front View of ONYX-1022 Series*

Control Button	Function
	Press 2 seconds to turn on the power
	Increase LCD brightness
	Decrease LCD brightness
	Increase speaker volume Hardware volume control - does not associate with Windows volume bar
	Decrease speaker volume Hardware volume control - does not associate with Windows volume bar

*Table 2.1: Functions of Control Buttons*

The sunken I/O section is at the bottom, as shown in Picture 2.2.



*Picture 2.2: Rear View of ONYX-1022 Series*

When you turn ONYX-1022 around and look at its right side, one Smart Card reader is on the right side as shown in Picture 2-3.

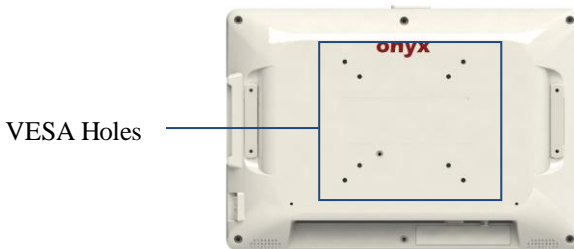


*Picture 2.3:Right View of ONYX-1022 Series*

## 2.3 Mounting

---

ONYX-1022 can be mounted with 75mm x 75mm or 100mm x 100mm VESA holes in the rear cover by wall-mount or desktop stand.



## 2.4 Turn On and Boot up into Windows OS

---

This section is for Windows operating system only. If you are installing a different operating system, please contact your vendor for installation details.

Your ONYX-1022 will begin loading Windows OS once you push the power button to turn power on. After less than one minute, Windows desktop screen will appear.

You can select the programs from the start menu in the left-down corner of the desktop screen.

## 2.5 Turn off

---

Turning off ONYX-1022 properly is important for system reliability. There are two ways to turn off the system.

1. On the start menu, click “shut down” and select “OK”
2. Push the power button and then the system will shut down automatically

Chapter

3

# Driver Installation

There are several installation ways depending on the driver package under different Operating Systems.

***Please follow the sequence below to install the drivers:***

**For Windows 7/8.1:**

Step 1 – Chipset Driver

Step 2 – Graphics Driver

Step 3 – LAN Driver

Step 4 – Audio Driver

Step 5 – USB 3.0 Driver

Step 6 – Resistive Touch Screen Driver(only for ET series)

Step 7 – TPM Driver

**For Windows 10:**

Step 1 – Chipset Driver

Step 2 – Graphics Driver

Step 3 – Audio Driver

Step 4 – MBI Driver

Step 5 – TXE Driver

Step 6 – TPM Driver

Step 7 – Resistive Touch Screen Driver(only for ET series)



Appendix

A

## Miscellanea

## A.1 General Cleaning Tips

---

You may need the following precautions before you begin to clean the computer. When you clean any single part or component for the computer, please read and understand the details below fully.

1. Be cautious of the tiny removable components when you use a vacuum cleaner to absorb the dirt on the floor.
2. Turn the system off before you start to clean the component or computer.
3. Never drop the components inside the computer or get circuit board damp or wet.
4. Be cautious of all kinds of cleaning solvents or chemicals when you use it for the sake of cleaning. Some individuals may be allergic to the ingredients.
5. Try not to put any food, drink or cigarette around the computer.
6. ONYX Healthcare Inc. has tested and verified these cleaning disinfectants: CIDEX, Viraguard, Control III Disinfectant Germicide, Caviwipes, Dispatch Disinfectant Cleaner CLH69101, Puregreen 24 Disinfectant, can be used with ONYX-1022. Use of any other disinfectants will void the warranty. These cleaning disinfectants should be applied with a cloth or wipe, not sprayed directly on the computer. After disinfecting, it is recommended to

thoroughly dry the Onyx-1022 with a lint-free cloth.

***Note: We strongly recommend that you should shut down the system and remove the power cord before cleaning ONYX-1022.***

## A.2 Cleaning tools

---

Although many companies have created products to help improve the process of cleaning your computer and peripherals users can also use household items to clean their computers and peripherals. Below is a listing of items you may need or want to use while cleaning your computer or computer peripherals.

Keep in mind that some components in your computer may only be able to be cleaned using a product designed for cleaning that component, if this is the case it will be mentioned in the cleaning tips.

- **Cloth** - A piece of cloth is the best tool to use when rubbing up a component. Although paper towels or tissues can be used on most hardware as well, we still recommend you to rub it with a piece of cloth.
- **Water or rubbing alcohol** – You may moisten a piece of cloth a bit with some water or rubbing alcohol and rub it on

the computer. Unknown solvents may be harmful to the plastics parts.

- **Vacuum cleaner** - Absorb the dust, dirt, hair, cigarette particles, and other particles out of a computer can be one of the best methods of cleaning a computer. Over time these items can restrict the airflow in a computer and cause circuitry to corrode.
- **Cotton swabs** - Cotton swabs moistened with rubbing alcohol or water are excellent tools for wiping hard to reach areas in your keyboard, mouse, and other locations.
- **Foam swabs** - Whenever possible it is better to use lint free swabs such as foam swabs.

**Note:**

*We strongly recommended that you should shut down the system before you start to clean any single components.*

**Please follow the steps below.**

1. Close all application programs.
2. Close operating software.
3. Turn off power switch
4. Remove all device
5. Pull out power cable

## A.3 Scrap Computer Recycling

---

If the computer equipments need the maintenance or are beyond repair, we strongly recommended that you should inform us as soon as possible for the suitable solution. For the computers that are no longer useful or work well, please contact with worldwide distributors for recycling.

The worldwide distributors show on the following website:

<http://www.onyx-healthcare.com.tw/Contact.php>

**Note:**

Follow the national requirement to dispose unit