KAUKO MARKKINAT

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Joensuun seudun hankintatoimen johtokunta

Hankintaoikaisuvaatimus SEU14574 tarjouspyyntöön

Kaukomarkkinat Oy vaatii kategorian 3) Medical-PC tuotteiden osalta seuraavien toimijoiden hylkäämistä. Fujitsu Finland Oy, Mikkelin Puhelin Oyj, BusinessForum Oy, Atea Finland Oy ja BCC Finland Oy ovat tarjonneet tuotteita, jotka eivät täytä kilpailutuksen minimivaatimuksia ja osassa tuotteista on myös selviä puutteita lainsäädännön osalta. Hankintalaki vaatii toimijoiden tasavertaista kohtelua. Kaukomarkkinat Oy on täyttänyt kaikki hankintakilpailun vaatimukset ja tarjonnut tuotetta, joka vaatimusten ja vaatimuksenmukaisuuden mukainen. Kaukomarkkinat Oy jäi kilpailutuksessa viimeiselle sijalle tästä johtuen ja on joutunut kohdelluksi epätasarvoisesti.

Laki terveydenhuollon laitteista ja tarvikkeista etusijalla suhteessa hankintalakiin.
http://www.finlex.fi/fi/laki/alkup/2010/20100629
13 §
Ilmoitettua laitosta käytettäessä valmistajan on laadittava vaatimustenmukaisuuden arvioinnin mahdollistavat asiakirjat ja kirjeenvaihto arvioinnin suorittavan ilmoitetun laitoksen hyväksymällä Euroopan unionin jäsenvaltion virallisella kielellä.

Medical PC kytketään RS232 porttien kautta lääkintälaitteisiin sekä sijoitetaan hoitoalueelle. Lääkintälaitteiden valmistaja ja laki vaatii, että hoitoalueella sijaitsevien laitteiden on oltava määräysten mukaisia. Tämä rinnastetaan toimintayksikön laitevalmistukseen. Eli kilpailutuksessa on valittava tuotteita, jotka ovat 29 pykälän mukaisia ja vastuuhenkilö voi allekirjoittaa vaatimuksenmukaisuuden täyttymisen. Tätä lakia ei voida ohittaa sopimuksilla toimittajan ja hankintaorganisaation välillä, joissa toimittaja toteaa vaatimuksenmukaisuuden täyttymisen. Terveydenhuollossa käytettävät laitteet ovat potilasturvallisuuden alaisia ja niiden käyttöönotossa vaaditaan erityistä huolellisuutta. Vahinkotapauksen sattuessa kaikki dokumentaatiot ja huolellisuuden noudattaminen tutkitaan.

29 §

Terveydenhuollon toimintayksikön oman laitevalmistuksen vaatimukset

Jos terveydenhuollon toimintayksikkö harjoittaa omaa laitevalmistusta, sillä tulee olla valmistuksesta vastaava vastuuhenkilö. Terveydenhuollon toimintayksikön on osoitettava, että sen valmistama terveydenhuollon laite on olennaisten vaatimusten mukainen. Vastuuhenkilön on hyväksyttävä toimintayksikössä valmistetun laitteen käyttöönotto varmistuttuaan sitä ennen siitä, että laite täyttää 6 §:n mukaiset olennaiset vaatimukset. Terveydenhuollon toimintayksikön on laadittava vastuuhenkilön allekirjoituksellaan hyväksymä vakuutus, jonka mukaan sen valmistama laite on olennaisten vaatimusten mukainen. Vakuutus on pidettävä Sosiaali- ja terveysalan lupa- ja valvontaviraston saatavilla viiden vuoden ajan laitteen käyttöönotosta

Seuraavat tuotteet eivät täytä vaatimuksia:

Onyx Zeus (.PDF sivu 9):
16. 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

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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.

Valmistajalla on tuotteessa vain yksi RS232 isoloitu portti (isoloinnin kV taso ei ole tiedossa). Valmistaja ei tarjoa eikä lisää RS232 porttien määrää kilpailutuksessa vaadittuun tasoon. Jos maahantuoja on lisännyt RS232 kortin, se on rikkonut valmistajan ohjetta ja joutuu vastaamaan CE ja EN60601 dokumentaatiosta omana laitteenaan. Kaikki muutokset laitteissa johtavat vaatimuksenmukaisuuden poistumiseen ilman uusia lisätestejä, joissa auktorisoitu testilaitos antaa uudet sertifikaatit muutoksen johdosta.
http://www.onyx-healthcare.com/product/104/ZEUS-227E.pdf
Onyx Zeus laitteella ei ole myöskään esittää CE-dokumenttia eikä testisertifikaatteja kuten laissa terveydenhuollon laitteista ja tarvikkeista vaaditaan.
23) *ilmoitetulla laitoksella* Euroopan unionin jäsenvaltion nimeämää ja Euroopan komissiolle ilmoitettua laitosta, jolla on oikeus tehdä vaatimustenmukaisuuden arviointeja.

Advantech (Sivu V):

Furthermore all configurations shall comply with the system standard IEC 60601-1-1. Anyone who connects additional equipment to the signal input part or signal output part is configuring a medical system, and is therefore, responsible that the system complies with the requirements of the system standard IEC 60601-1-1. The unit is for exclusive interconnection with IEC 60601-1 certified equipment in the patient environment and IEC 60XXX certified equipment outside of the patient environment. If in doubt, consult the technical services department or your local representative.

Lisäksi MIOe-110 kortin eritystaso on vain 2,5 kV. Eli ei täytä vaatimuksia kilpailutuksen osalta.
(Vastattu 25.2.2014 15:23:07)
Vaatimus isoloinnille on voimassa. Vaaditaan EN60601-1 mukainen isolointi 4KV.

Valmistajalla on tuotteessa vain kaksi RS232 isoloitua porttia. Valmistaja ei tarjoa eikä lisää RS232 porttien määrää kilpailutuksessa vaadittuun tasoon. Jos maahantuoja on lisännyt RS232 kortin, se on rikkonut valmistajan ohjetta ja joutuu vastaamaan CE ja EN60601 dokumentaatiosta omana laitteenaan. Kaikki muutokset laitteissa johtavat vaatimuksenmukaisuuden poistumiseen ilman uusia lisätestejä, joissa auktorisoitu testilaitos antaa uudet sertifikaatit muutoksen johdosta.

Ohessa valmistajan oikea datasheet. Liitteenä Suomalaisen maahantuojan modifioima suomenkielinen datasheet. Maahantuoja tuo maahan sekä Advantech ja Onyx merkkisiä laitteita.
http://downloadt.advantech.com/ProductFile/PIS/POC-W211/Product%20-%20Datasheet/POC-W211_Intel_DS20140401145420.pdf

Viewmedic Clinio 322C5 Touch:

Tarjouspyynnössä vaadittiin neljää eristettyä RS232 porttia. Clinio mallissa on vain kaksi RS232 liitäntää, joten lisäportit on saavutettavissa ainoastaan lisäkortilla, jonka lisääminen muuttaa laitetta siten, että tuotteen sertifikaatit eivät ole enää voimassa. Kysymyksessä on sama asia kuin Onyxin ja Advantechin tuotteissa.
http://www.reinmedical.com/en/viewmedic-products/medical-all-in-one-computer-clinio3-concept.html
http://www.reinmedical.com/en/viewmedic-products/medical-all-in-one-computer-clinio3-concept.html
Reinmedicalilla ei ole esittää EN60601-1 sertifikaattia tuotteestaan. CE dokumentissa ja nettisivuilla sertifikaatit ovat markkinointimielessä, mutta kyseistä lain vaatimaa riippumattoman testilaitoksen sertifikaattitodistusta ei ole olemassa. Ilman sitä CE dokumentti ei ole pätevä.
23) *ilmoitetulla laitoksella* Euroopan unionin jäsenvaltion nimeämää ja Euroopan komissiolle ilmoitettua laitosta, jolla on oikeus tehdä vaatimustenmukaisuuden arviointeja.

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Espoossa 3.6.2014

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ZEUS-247/227/197

24”/22”/19” LCD with LED Backlight

Intel® Core™ i7 Quad Core/Dual Core Processor

Intel® QM77 Chipset

Smart View Medical Station

ZEUS-247/ZEUS-227/ZEUS-197 Manual 1st Ed
Jan, 2013

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- SiS is a trademark of Silicon Integrated Systems Corp.
- VIA is a trademark of VIA Technology, Inc.

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

Packing List

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

- ZEUS-247/227/197 Smart View Medical Station
- Utility CD-ROM, which contains Drivers and Utilities

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

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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. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.
12. Never pour any liquid into an opening. This could cause fire or electrical shock.
13. Never open the equipment. For safety reasons, only qualified

service personnel should open the equipment.

14. If any of the following situations arises, get the equipment checked by service personnel:

a. The power cord or plug is damaged.

b. Liquid has penetrated into the equipment.

c. The equipment has been exposed to moisture.

d. The equipment does not work well, or you cannot get it to work according to the users manual.

e. The equipment has been dropped and damaged.

f. The equipment has obvious signs of breakage.

15. 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.

16. 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 production 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

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

	ZEUS-247/227/197 modules are developed to suitable for the Classification Mark requirement

Safety Symbol Description

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

	*Medical equipment with respect to electric shock, fire and mechanical hazards only in accordance with* ***ANSI/AAMI ES 60601-1: 2005 AND CAN/CSA-C22.2 No. 60601-1:08***
	*Attention, consult ACCOMPANYING DOCUMENTS.*
	*Stand-by* ***(Green light)***
	*Ground wire* *Protective Ground wire.*
	*Medical equipment with respect to electric shock, fire and mechanical hazards only in accordance with UL 60601-1, and CAN/CSA C22.2 NO. 601.1*

Contents

Chapter

1

General Information

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1.1 Introduction

The ZEUS-247/227/197 Smart View Medical Stations are based on Intel® Core™ i7 Quad Core/Dual Core processor, which delivers a performance improvement of more than 100 percent compared to systems running traditional single-core processors. With two/four cores, or computing engines, ONYX can simultaneously execute two/four computing tasks. It accommodates one 2.5" SATA hard disk drive/SSD and two DDRIII SODIMM up to 16GB.

The high brightness LCD, Low Noise solution, integrated multimedia functions and extensive expansion options make them the perfect platform upon which to build comprehensive lifestyle computing applications.

The ZEUS-247/227/197 include all the features of a powerful computer into a slim and attractive chassis. The ZEUS-247 has a 24" 300 nits TFT display with 1920 x 1200 resolutions. ZEUS-227 has a 22" 300 nits TFT display with 1920 x 1080 resolutions. ZEUS-197 has a 19" 300 nits TFT display with 1280 x 1024 resolutions. Integrating with high brightness LCD is easier to analyze DICOM image. ZEUS series owns side mount USB 3.0 ports, slim DVD-RW drive and a smart card reader to support high speed data transfer and ID check by smart card reader. Combining the ZEUS-247/227/197 into your system can achieve both cost-saving and efficient improvements in common applications including Surgical, Radiology, PACS (Picture Archiving

Communication Systems), LIS (Lab Information Systems) and Electronic Medical Record. The ZEUS-247/227/197 are definitely your perfect choices.

1.2 Feature

- 24”/22”/19” Intel® Core™ i7 Quad Core/Dual Core Processor
- Supports Dual Channel DDR3 SODIMM up to 16GB
- Built-in RFID and Smart Card Security (Optional)
- Supports PCI Express[x16] Expansion
- High Speed USB 3.0 Ports
- 10 Smart Function Keys
- DICOM Compliance(optional)

1.3 Specification

Hardware Specifications

Display	ZEUS-247: 24” 1920x1200 LCD ZEUS-227: 22” 1920x1080 LCD ZEUS-197 19” 1280x1024 LCD
CPU	Intel® Core™ i7/i3 Processor
Disk Drive Space	2.5” Hard Disk Drive/Solid State Drive Slim DVD-RW Drive (optional)
Expansion	One PCI Express[x16] expansion
Function Key	Power On/Off, Speaker Volume Up/Down, LCD Brightness Up/Down, LCD On/Off, Touch Screen On/Off, Display Mode(optional), Reading Light On/Off
I/O	1x Isolated RS-232 port 1x Isolated USB 2.0 port 4x USB 2.0 ports 4x USB 3.0 ports 2x Isolated Gigabit LAN 1x Display Port *Sound:* 1 x Line-out 1 x Mic-in

LCD Specifications

Model Name	ONYX-247 series	ONYX-227 series
Display Type	24” LCD	22” LCD
Max. Resolution	1920 x 1200	1920 x 1080
Max. Colors	16.7M	16.7M

Dot Size (mm)	0.297 x 0.297	0.294 x 0.294
Luminance (cd/m2)	300(TYP)	300 or 250 (TYP)
Back Light Life Time	30,000 Hrs	50,000 or 30,000 Hrs

Model Name	ONYX-197 series
Display Type	19” LCD
Max. Resolution	1280 x 1024
Max. Colors	16.7M
Dot Size (mm)	0.297 x 0.297
Luminance (cd/m2)	300 or 350(TYP)
Back Light Life Time	50,000 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

Architecture	Close-frame
Front Bezel	Plastic bezel with resistive touch screen
Color	White
Mounting / Holder	VESA 75/100mm
Construction	3mm ABS + PC TYPE Plastic housing
Dimension (WxHxD)	ZEUS-247: 600mmx 415mm x 65 mm ZEUS-227: 546mm x 351mm x 66mm ZEUS-197: 450mm x 388mm x 66mm
Net Weight	ZEUS-247: 21.4 lb (9.7 Kg) ZEUS-227: 18.7 lb (8.5 kg) ZEUS-197: 16.5lb (7.5Kg)

Power Supply Specifications

Model	POWER-WIN PW-M110A-1Y240G
Input Voltage	90~264 V AC, 2A max. @ 47 ~ 63 Hz
Output Voltage	24V, 4.6A, 110W max.
MTBF	100,000 hrs operation at 25˚C

Environmental Specifications

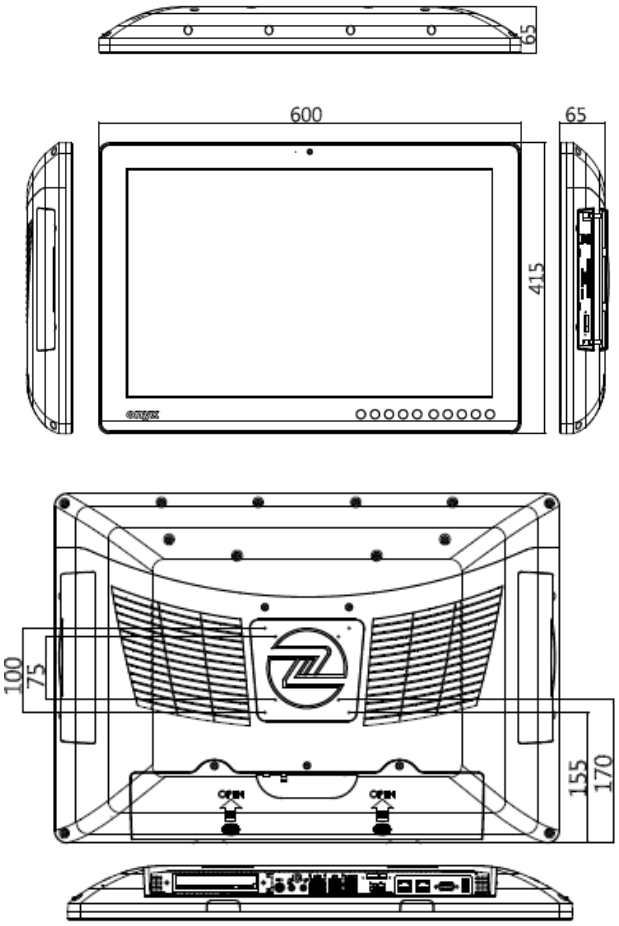
Operating Temperature	0˚C to 40˚C (32˚F ~104˚F)
Storage Temperature	-20˚C to 60˚C (-4˚F ~140˚F)
Storage Humidity	5% to 95%@ 40˚C, non-condensing
Vibration	0.5G / 5 ~ 500Hz (Random) / operation
Shock	15G peak acceleration (11 msec. duration) / operation
Drop	76cm (1 Corner, 3 Edge, 6 Surface)
EMI / Safety	CE / FCC Class B/UL 60601-1/EN 60601-1
IP	Front bezel, IP-65 Certified
Noise	35db (full operation)

Touch Screen (Optional)

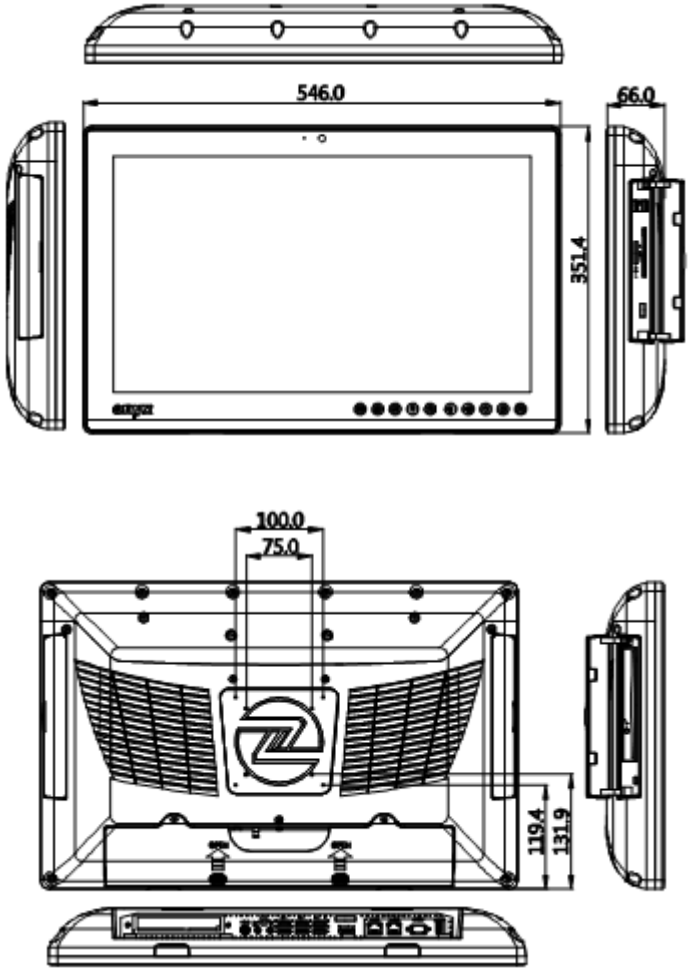
Type	Projective Capacitive / 5-wire Resistive
Interface	USB interface
Light Transmission	> 75%
Life Time	35 million activations

1.4 Dimension

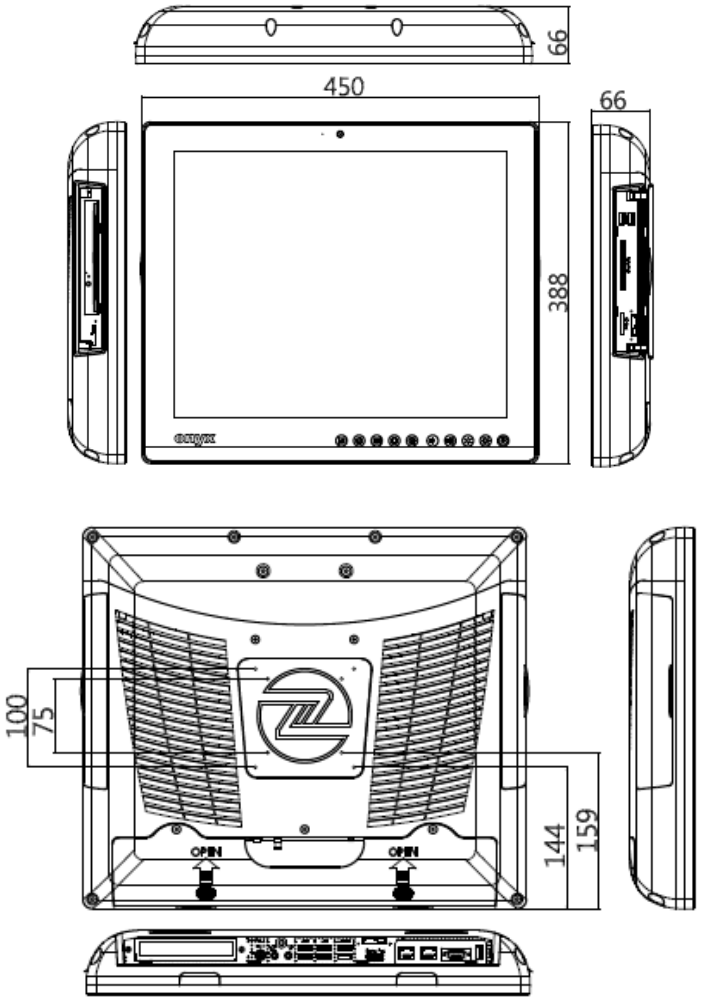
ZEUS-247



ZEUS-227



ZEUS-197



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.

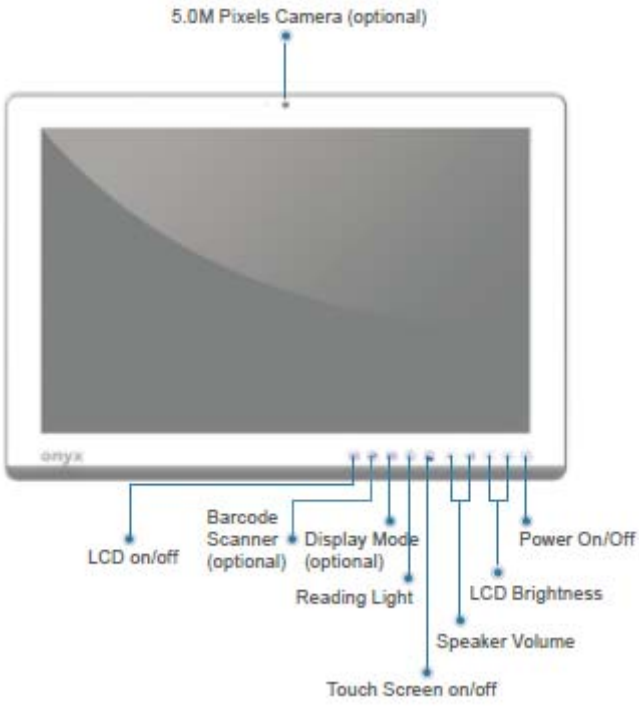
Caution!

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 the ZEUS-247/227/197

Before you start to set up the ZEUS-247/227/197, take a moment to become familiar with the locations and purposes of the controls, drives, connections and ports, which are illustrated in the figures below.

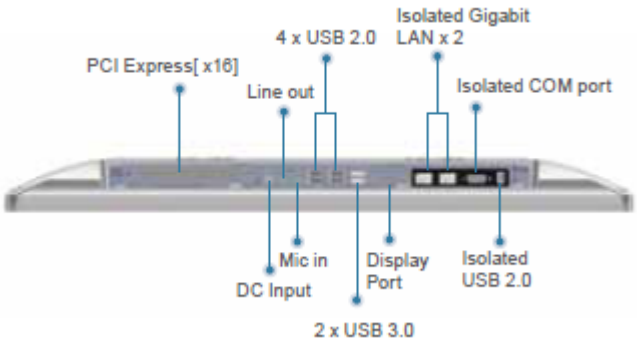
When you place the ZEUS-247/227/197 upright on the desktop, its front panel appears as shown in Picture 2-1.



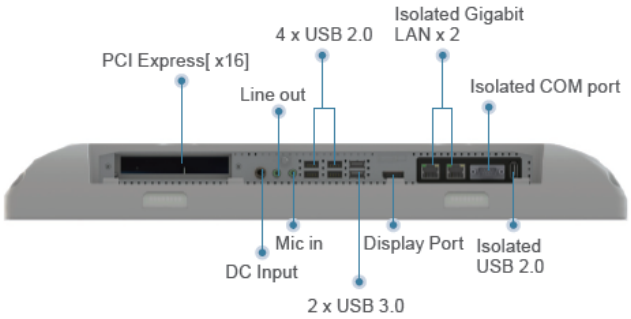
Picture 2.1: Front View of the Zeus Series

When you turn the Medical Station around and look at its rear cover, the sunken I/O section is at the bottom of the station, as shown in Picture 2-2. (The I/O section includes various I/O ports, including a serial port, Display Port, the Ethernet ports, USB ports, the microphone jack, PCI Express slot, and so on.) The Medical Station integrates WLAN function by using Mini Card.

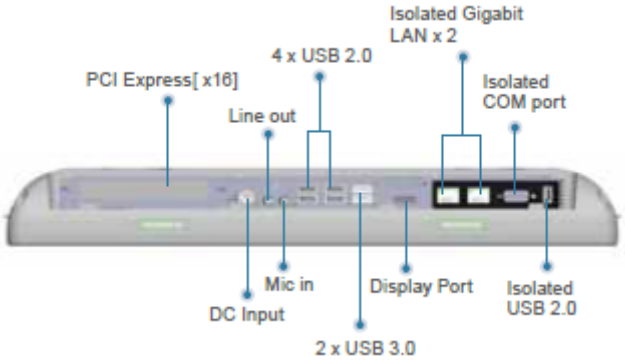
ZEUS-247



ZEUS-227



ZEUS-197



Picture 2.2: Rear view of the Zeus Series

When you turn the Medical Station around and look at its left side, two USB 3.0 ports, the smart card reader and DVD-RW drive are on

the right side and the left side of the Medical Station as shown in Picture 2-3.

Picture 2.3: Left view of the Zeus Series

2.3 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 ZEUS 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.

2.4 Turn off

Turning off ZEUS 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:

Step 1 – Install INF Driver

Step 2 – Install VGA Driver

Step 3 – Install LAN Driver

Step 4 – Install Audio Driver

Step 5 – USB 3.0 Driver

Step 6 – RAID&AHCI Driver

Step 7 – ME Driver

Step 8 – TPM Driver

Step 9 – Serial Port Driver(optional)

Step 10 – Smart Card Driver

Step 11 – Touch Panel Driver

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. Never spray or squirt the liquids directly onto any computer component. If you need to clean the device, please rub it with a piece of dry cloth.
2. Be cautious of the tiny removable components when you use a vacuum cleaner to absorb the dirt on the floor.
3. Turn the system off before you start to clean up the component or computer.
4. Never drop the components inside the computer or get circuit board damp or wet.
5. 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.
6. Try not to put any food, drink or cigarette around the computer.
7. 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 the ONYX-175/195. Use of any other

disinfectants will void the warranty.

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 swaps 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:

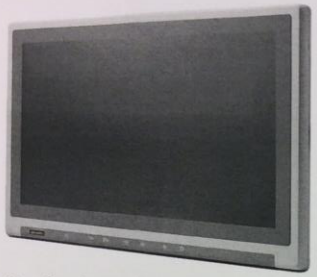
Follow the national requirement to dispose unit

Liite 6
Sivu 2

ADVANTECH

POC-W211

Suorituskykyinen ja ohut sairaalatietokone



- Intel® Core™ i7 suorituskykyä, ei tuuletinta
- Erittäin ohut näyttö, vain 65 mm max.
- 21.5" laajakuvanäyttö
- Isoloidut COM- ja LAN-portit suojaavat virransyötön häiriöiltä
- IPX1 suojaluokitus, etupaneeli IP65
- EN60601-1 ja EN60601-1-2
- Optiona saatavilla Bluetooth, RFID-lukija, Blu-Ray-asema, WLAN ja Li-Ion akku

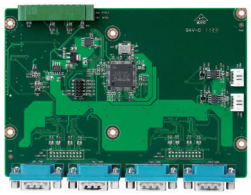
Ominaisuudet

Järjestelmä	Piirisarja	Intel QM67
	Suoritin	Intel® Core™ i7-3555LE -suoritin
	Keskusmuisti	Max. 16 GB DDR3 1333 Mhz SDRAM
	Näytönohjain	Integroitu Intel HD Graphics
	Käyttöjärjestelmä	Windows XP Pro tai Windows 7 Pro
Näyttö	Näytön koko	21.5" laajakuva LCD-näyttö (16:9)
	Max. resoluutio	1920x1080
	Max. värit	16.7 M väriä
	Pixelit	248.25 x 248.25
	Katselukulma	178/178°
	Valoisuus	250cd / m²
	Taustavalo	LED
	Kontrasti	5000:1
Laajennus-paikat	Mini PCIe	1x Mini PCIe
	PCIe/PCI	optiona 1x PCIe (x1)
I/O-portit	Sarjaportit	1x RS-232 (isoloitu) ja 1x RSA-232/422/485 (isoloitu). Optiona 2x RS232 isoloitu.
	USB 2.0	4
	VGA/DVI	1x VGA
	Kaiuttimet	2
	LAN	2x Gigabit Ethernet (isoloitu) RJ-45
	HDMI	1x HDMI
Massamuisti	Kiintolevy	1x 2,5" SATA
Virtalähde	DC-malli	AC/DC
	Sisääntulovirta	90-260Vac, 1.35 ~ 0.5 A, 47 ~ 63 Hz
	Ulostulovirta	+ 18 Voc 5.55 A max (100 W)
Optio-toiminnot	Akku	3S2P 4200 mAH, 0.5 h varmuuskopiointituki Voidaan varustaa joko akulla tai PCIe-kortilla
	Älykortinlukija	ISO7816-1,2,3,T=1 ja T=0 -yhteensopiva
	WLAN	Integroitu langaton 802.11 a/b/g/n yhteys ja antenni
	RFID	13.56MHz ISO-15693 & ISO-1443A/B
	Bluetooth	Integroitu Bluetooth v2.0 + EDR
	Optinen asema	DVD-RW SATA, Blu-ray RW
Näyttöoptio	Tyyppi	Resistiivinen kosketusnäyttö
IP-suojaluokitus	Etupaneli	IP65
	Koko järjestelmä	IPX1
Sertifikaatit		UL60601-1/EN60601-1, CE & FCC Class B sertifioitu, CCC
Ympäristö	Lämpötila	0 ~ 40° C (32 ~ 104° F) käyttölämpötila
	Kosteus	10 ~ 95% @ 40° C (ei kondensoitu)
	Iskunkestävyys	20G (11 ms)
Fyysiset mitat	Mitat (LxSxK)	550x360x65 mm
	Paino	6.9 kg

MI/O Extension Modules

MIOe-210

4 x RS232/422/485, 2 x RS422/485, 8-bit GPIO



CE FCC

Specifications

General	
Bus Interface	MIOe LPC
Ports	4 x RS232/422/485, 2 x RS422/485
GPIO	8-bit with 3.3V level
Communications	
Data Bits	5, 6, 7, 8
Data Signals	RS-422: TxD+, TxD-, RxD+, RxD- RS-485: DATA+, DATA- RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND
IRQ	Depends on MI/O CPU Board
Parity	even, odd, sticky or no
Speed	50 to 115.2k Baud
Stop Bits	1, 1.5, 2
Protection	
EFT Protection	Air gap ±15kV, contact ±8kV
Compatibility	
Rear I/O	MI/O-Compact
Mechanical	MI/O-Compact
Function	MI/O-Compact*, MI/O-Ultra*
Environment	
Dimensions	146 x 102 mm (5.7" x 4")
Weight	0.186 kg (0.41 lb)
Operating Humidity	0 ~ 90 % relative humidity, non-condensing
Operating Temperature	0 ~ 60° C (32 ~ 140° F)
Storage Temperature	-40° C ~ 85° C and 60° C @ 95% RH Non-Condensing
Power	
Power Supply Voltage	Supported by MI/O Extension SBC

* Requires customized BIOS for MI/O CPU board support.

Ordering Information

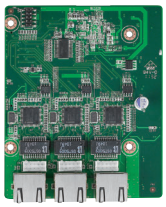
P/N	Description
MIOe-210-D6A1E	4 x RS232/422/485, 2 x RS422/485, 8-bit GPIO

Accessories

Part No.	Description	Quantity
1703040157	RS-422/485 W/D-SUB COM 4P 15 cm	2

MIOe-220

3 x Intel® Gigabit Ethernet



CE FCC

Specifications

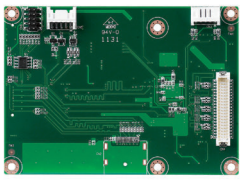
General	
Bus Interface	MIOe PCI Express
Chipset	Intel® 82583V Gigabit Ethernet Controller
PCIe Switch	PLX PEX8605
Port	3 x RJ45
Speed	10/100/1000 Mbps
Compatibility	
Rear I/O	MI/O-Compact
Mechanical	MI/O-Compact
Function	MI/O-Compact, MI/O-Ultra
Mechanical and Environmental	
Dimensions (L x W)	102 x 83 mm (4" x 3.2")
Weight	0.182 kg (0.401 lb)
Operating Temperature	Standard operating: 0 ~ 60° C (32 ~ 140° F)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
Storage Temperature	-40° C ~ 85° C and 60° C @ 95% RH Non-Condensing
Power	
Power Supply Voltage	Supported by MI/O Extension SBC

Ordering Information

P/N	Description
MIOe-220-L3A1E	3 x Intel® Gigabit Ethernet without PCIe Switch
MIOe-220-B3A1E	3 x Intel® Gigabit Ethernet with PCIe Switch (for MIO-5250 /MIO-5251/ MIO-5271)

MIOe-230

48-bit LVDS or DisplayPort[1], 2 x USB 2.0



CE FCC

Specifications

General	
Bus Interface	MIOe Displayport & USB 2.0
Controller	Chrontel CH7511
Brightness Control	Supported
USB	2 x USB 2.0
Compatibility	
Rear I/O	MI/O-Ultra
Mechanical	MI/O-Compact, MI/O-Ultra
Function	MI/O-Compact[2], MI/O-Ultra[2]
Mechanical and Environmental	
Dimensions (L x W)	100 x 72 mm (3.9" x 2.8")
Weight	0.084 kg (0.185 lb)
Operating Temperature	0 ~ 60° C (32 ~ 140° F)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
Power	
Power Supply Voltage	Supported by MI/O Extension SBC

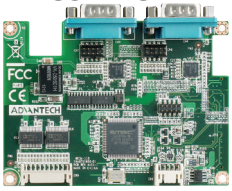
[1] Support by request
[2] Requires customized BIOS or HW adjustment for MI/O CPU board support.

Ordering Information

P/N	Description
MIOe-230-L0A1E	48-bit LVDS or DisplayPort, 2 x USB 2.0

MIOe-110

2 x RS-232, 2 x RS-232/422/485 (with power and isolation), 2 x USB 2.0



CE FCC

Specifications

General	
Bus Interface	MIOe LPC/USB
Super I/O	SCH3106
Rear I/O	
COM port	COM1/2: Both at coastline and internal box wafer, simultaneously COM1: RS-232/422/485 (With isolation. RS-485 with auto flow control). COM2: RS-232/422/485 (Supports wake on ring. Supply 5V/12V power selected by jumper. RS-485 with auto flow control).
Internal I/O	
COM port	COM3/4: RS-232 (Support wake on ring)
USB 2.0	2
Communications	
Data Bits	5, 6, 7, 8
Data Signals	RS-422: TxD+, TxD-, RxD+, RxD- RS-485: DATA+, DATA- RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND
IRQ	Depends on MI/O CPU Board
Parity	even, odd, sticky or no
Speed	50 to 115.2k Baud
Stop Bits	1, 1.5, 2
Protection	
ESD	Air gap ±15kV and contact ±8kV for all COM ports
Isolation	2.5kV for COM1
Compatibility	
Rear I/O	MI/O-Ultra
Mechanical	MI/O-Ultra
Function	MI/O-Compact*, MI/O-Ultra*
Environment	
Dimensions	100 x 72 mm (3.9" x 2.8")
Weight	0.04 kg (0.09lb), only for board
Operational Temperature	0 ~ 60° C (32 ~ 140° F)
Operational Humidity	40° C @ 95% RH Non-Condensing
Storage Environment	-40° C ~ 85° C and 60° C @ 95% RH Non-Condensing
Power	
Power Supply Voltage	Supported by MI/O Extension SBC

* Requires customized BIOS for MI/O CPU board support

Ordering Information

P/N	Description
MIOe-110F-00A1E	2 x RS-232/422/485, 2 x RS-232, w/ isolation, 2 x USB
MIOe-110L-00A1E	1 x RS-232/422/485, 2 x RS-232, w/o isolation, 2 x USB

Accessories

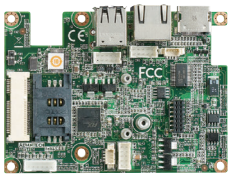
P/N	Description	Quantity
1700018999	COM3/4 cable 22cm	1

Optional Accessories

P/N	Description
1700019414	COM1/2 internal cable 30cm
1700019071	2 ports USB cable w/o bracket, 12cm

MIOe-120

2 x GbE, HDMI, Mini PCIe, SIM holder, speaker out, LPC, 2 x USB 2.0



CE FCC

Specifications

General	
Bus Interface	MIOe PCI Express/ USB/ LPC/ Audio line-out
Ethernet controller	GbE Intel® 82583V
PCIe Switch	PLX PEX8605
USB Hub Controller	Terminus FE1.1 USB 2.0 4-port hub
Rear I/O	
GbE	1 (10/100/1000 Mbps), both at coastline and internal box wafer, simultaneously
USB 2.0	2 (Both at coastline and internal box wafer, simultaneously)
HDMI	1 (by request, only for MIO-2261)
Internal I/O	
GbE	1 (10/100/1000 Mbps)
Speaker out	1 with amplifier (Max 2.2W/ch stereo into a 3Ω load)
LPC	1 (support extra four COM ports by PCA-COM232-00A1E or PCA-COM485-00A1E, TPM module by PCA-TPM-00A1E)
Expansion	
Mini PCIe	1 (full size, with SIM holder, including of USB interface)
Compatibility	
Rear I/O	MI/O-Ultra
Mechanical	MI/O-Compact, MI/O-Ultra
Function	MI/O-Compact*, MI/O-Ultra*
Mechanical and Environmental	
Dimensions (L x W)	100 x 72 mm (3.9" x 2.8")
Weight	0.04 kg (0.09lb), only for board
Operational Temperature	Standard operating: 0 ~ 60° C (32 ~ 140° F)
Operational Humidity	40° C @ 95% RH Non-Condensing
Storage Temperature	-40° C ~ 85° C and 60° C @ 95% RH Non-Condensing
Power	
Power Supply Voltage	Supported by MI/O Extension SBC

* 1. HDMI: Only for MIO-2261, supported by request
2. LPC: Supported by OEM BIOS for PCA-COM232-00A1E, PCA-COM485-00A1E, and PCA-TPM-00A1E
3. MIO-5250 doesn't support MIOe-120L

Ordering Information

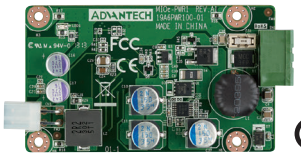
P/N	Description
MIOe-120F-00A1E	2 x GbE w/ PCIe switch, 2 x USB, Mini PCIe, SIM holder, speaker-out with amplifier, LPC
MIOe-120L-00A1E	1 x GbE w/o PCIe switch, 2 x USB, Mini PCIe, SIM holder, speaker-out with amplifier, LPC

Optional Accessories

P/N	Description
1700019001	1 x LAN cable, 15cm
1700019071	2 ports USB cable w/o bracket, 12cm
PCA-COM232-00A1E	4 x RS-232 extension module, 31.5x48mm
PCA-COM485-00A1E	4 x RS-422/485 extension module, 31.5x48mm
PCA-TPM-00A1E	TPM module, 31.5 x 48 mm

MIOe-PWR1

12-24V DC to DC Power Module MI/O-Chassis compliant



CB CE FCC

Specifications

General	
Input Voltage	12 to 24 V_{DC} ±5%
Output Voltage	12V ±10%
Output Current	Max. 5A
Protection	OVP, OCP, Anti-reverse
Connector type	Input: Phoenix 2pin Output: ATX 2x2pin
Mechanical and Environmental	
Dimensions (L x W)	90 x 53 mm (3.5" x 2.1")
Operating Temperature	0 ~ 60° C (32 ~ 140° F)
Weight	0.084 kg (0.185 lb)
Operating Humidity	0% ~ 90% relative humidity, non-condensing

Ordering Information

P/N	Description
MIOe-PWR1-00A1E	12-24V DC to DC power module
MIOe-PWR1Z-00A1E	12-24V DC power module -20 ~80 ° C

Accessories

Part No.	Description
1700021072-01	Power cable 2*2P-4.2/2*2P-4.2, 10cm

User Manual

POC-W211

Point-of-Care Terminal with Intel® Core™ i7 or i3 Processor and a 21.5" TFT LCD

ADVANTECH

Enabling an Intelligent Planet

Instructions for the User

The document combines text and illustrations, providing a comprehensive overview of the system. The information is presented as a sequential series of actions, allowing the user to learn directly how to use the device.

The text provides explanations and instructs the user step-by-step in the practical use of the product, with short, clear instructions in an easy-to-follow sequence.

Definitions

Warning! *A WARNING statement provides important information about a potentially hazardous situation which, if not avoided, could result in death or serious injury.*

Caution! *A CAUTION statement provides important information about a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient or in damage to the equipment or other property.*

Note! *A NOTE provides additional information intended to avoid inconveniences during operation.*

Safety Instructions

1. Strictly follow these Instructions for Use; please read these safety instructions carefully.
2. Please keep this User Manual for later reference; any use of the product requires full understanding and strict observation of all portions of these instructions. Observe all WARNINGS and CAUTIONS as rendered throughout this manual and on labels on the equipment.
3. Repair of the device may only be carried out by trained service personnel. Advantech recommends that a service contract be obtained with Advantech Service and that all repairs also be carried out by them. Otherwise the correct functioning of the device may be compromised.

Warning! *Because of the danger of electric shock, never remove the cover of a device while it is in operation or connected to a power outlet.*

Part No. 2008W22100 Edition 1
Printed in Taiwan February 2012

4. If one of the following situations arises, have 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 user manual.
   - The equipment has been dropped and damaged.
   - The equipment has obvious signs of breakage.
5. Disconnect this equipment from any AC outlet before cleaning. Use a damp cloth. Do not use liquid or spray detergents for cleaning and keep this equipment away from humidity.

Caution! *To avoid short-circuiting and otherwise damaging the device, do not allow fluids to come in contact with the device. If fluids are accidentally spilled on the equipment, remove the affected unit from service as soon as possible and contact the service personnel to verify that patient safety is not compromised.*

6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall may cause damage. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible.

Caution! *To prevent overheating, do not cover the openings or place the device in direct sunlight or near radiant heaters.*

7. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet. Position the power cord so that people cannot step on it. Do not place anything over the power cord. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over voltage.

Caution! *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). This may damage the equipment.*

8. If your computer does not keep the correct time or the BIOS configuration has been reset to default, the battery may have no charge.

Caution! *Do not replace battery yourself. Please contact a qualified technician or your retailer.*

The computer is provided with a battery-powered, real-time clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

Caution! *The battery charging indicator is not included with this device. It will be added to the finished system assembly and be shown with the completed system.*

9. Improper installation of VESA mounting can result in serious personal injury! VESA mount installation should be operated by professional technician, please contact the service technician or your retailer if you need this service. The detail operating procedure is specified in Appendix A.
10. Classification:
    1). Supply Class I adapter
    2). No applied part
    3). IPX1
    4). Continuous Operation
    5). Not AP or APG category

Warning! *This device is not suitable for use in the presence of flammable anesthetic mixture with air, oxygen, nitrous oxide, or for life support systems.*

11. Environmental protection: follow national requirements to dispose of unit.
12. Maintenance: to properly maintain and clean the surfaces, use only the approved products or clean with a dry applicator.

Caution! *When servicing the device, always use replacement parts that are qualified to Advantech standards. Advantech Digital Healthcare cannot warrant or endorse the safe performance of third-party replacement parts for use with our medical device.*

13. Make sure the user does not allow contact between SIP/SOPs and the patient at the same time.
14. When networking with electrical devices, the operator is responsible for ensuring that the resulting system meets the requirements set forth by the following standards:
    – EN 60601-1 (IEC 60601-1)
      Medical electrical equipment
      Part 1: General requirements for safety
    – EN 60601-1-1 (IEC 60601-1-1)
      Medical electrical equipment
      Part 1-1: General requirements for safety
      Collateral standard: Safety requirements for Medical electrical systems
    – EN 60601-1-2 (IEC 60601-1-2)
      Medical electrical equipment
      Part 1-2: General requirements for safety
      Collateral standard: Electromagnetic compatibility; Requirements and tests

Medical Equipment
With Respect to Electric Shock,
Fire, and Mechanical Hazards Only,
In Accordance with UL 60601-1,
CAN/CSA C22.2 No. 601.1, and
IEC 60601-1

15. Accessory equipment connected to analog and digital interfaces must be in compliance with the respective nationally harmonized IEC standards (i.e. IEC 60950 for data processing equipment, IEC 60065 for video equipment, IEC 61010-1 for laboratory equipment, and IEC 60601-1 for medical equipment.)

Furthermore all configurations shall comply with the system standard IEC 60601-1-1. Anyone who connects additional equipment to the signal input part or signal output part is configuring a medical system, and is therefore, responsible that the system complies with the requirements of the system standard IEC 60601-1-1. The unit is for exclusive interconnection with IEC 60601-1 certified equipment in the patient environment and IEC 60XXX certified equipment outside of the patient environment. If in doubt, consult the technical services department or your local representative.

Caution! *Use suitable mounting apparatus to avoid risk of injury.*

16. Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked "Hospital Only" or "Hospital Grade".
17. Use a power cord that matches the voltage of the power outlet, which has been approved and complies with the safety standard of your particular country.

Note! *Environmental protection*

Follow national requirements to dispose of unit.

Explanation of Graphical Symbols

IEC 60878 and ISO 3864-B.3.6 : Warning: dangerous voltage

ISO 7000-0434 : Caution, consult ACCOMPANYING DOCUMENTS.

ISO 7000-1641 : Follow operating instructions or consult instructions for use.

IEC 60417 -5009 : STAND-BY.

IEC 60417-5031 : Direct current.

IEC 60417-5021 : Equipotentiality.

Disposing of Old Products

Within the European Union

EU-wide legislation, as implemented in each member state, requires that waste electrical and electronic products carrying the mark shown at left must be disposed of separately from normal household waste. This includes monitors and electrical accessories, such as signal cables or power cords. When you need to dispose of your display products, please follow the guidance of your local authority, or ask the shop where you purchased the product, or if applicable, follow any agreements made between you and the provider.

The mark on electrical and electronic products only applies to the current European Union Member States.

FCC Class B

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 when the equipment is operated in a residential environment. This equipment generates, uses and can radiate radio frequency energy. If not installed and used in accordance with this user manual, it may cause harmful interference to radio communications.

Note that even when this equipment is installed and used in accordance with this user manual, there is still no guarantee that interference will not occur. If this equipment is believed to be causing harmful interference to radio or television reception, this can be determined by turning the equipment on and off. If interference is occurring, 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 the receiver
- Connect the equipment to a power 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! *Any changes or modifications made to the equipment which are not expressly approved by the relevant standard's authority could void your authority to operate the equipment.*

List of Accessories

Before installing your Point-of-Care Terminal, ensure that the following materials have been received:

- POC-W211 series Point-of-Care Terminal
- Accessories for POC-W211
- CD-ROM disc-"Drivers, User's manual and Utilities"
- Mounting kits and packet of screws.
- VESA mounting note x1
- China RoHs note x1

Warning! *No user serviceable parts inside; refer servicing to qualified personnel. Only the accessories indicated on the list of accessories above have been tested and approved to be used with the device. Accordingly it is strongly recommended that only these accessories be used in conjunction with the specific device. Otherwise the correct functioning of the device may be compromised.*

Additional Information and Assistance

Contact your distributor, sales representative, or Advantech's customer service center for technical support if you need additional assistance. Please have the following information ready before you call:

- Product name and serial number
- Description of your peripheral attachments
- Description of your software (operating system, version, application software, etc.)
- A complete description of the problem
- The exact wording of any error messages
- This equipment is a source of electromagnetic waves. Before use please, make sure that there are not EMI sensitive devices in its surrounding which may malfunction therefore.

Environmental protection

- Follow national requirements to dispose of unit.

Manufacturer:

Advantech Co., Ltd.

No.1, Alley 20, Lane 26, Rueiguang Road Neihu District, Taipei,

Taiwan 114, R.O.C.

TEL: (02) 2792-7818

Distributed in Europe by:

Advantech Europe GmbH Kolberger Straße 7

D-40599 Düsseldorf, Germany

Tel: 49-211-97477350

Fax: 49-211-97477300

Visit the Advantech websites at www.advantech.com or www.advantech.com.tw if you need more information.

Contents

Chapter 1

General Information

1.1 Introduction

The POC-W211 is a multimedia Intel® Core™ i7 or i3 processor series designed for mobile computing as a Point-of-Care terminal (POC.) It is a PC-based system with 21.5" wide screen TFT LCD display, single VGA Port, HDMI out, dual on-board 10/100/1000 PCI-E Ethernet controllers, and one LAN port. It supports the Intel AMT7.0 function, has dual COM ports, quad USB 2.0 ports and a 24-bit stereo audio controller. With an optional 2.5" SATA drive, the POC-W211 is a user-friendly computer. For system integrators, this highly integrated multimedia system lets you easily build a Point-of-Care Terminal into your applications. The POC-W211 makes it an ideal and safe point-of-care solution for patients and hospital practitioners.

The POC-W211 is specially designed to resist spills and water damage, and ensures dust resistance with its protected LCD and sealed ports. The POC-W211 is a reliable solution to your application's processing requirements.

Intended use - The POC-W211 is intended to serve as a Point-of-Care terminal (POC) for integration with hospital systems. POC-W211 is designed for general purpose medical computing in the hospital environment, for data collection and for displaying information.

It should not be used as a life-support system.

The latest version of this user manual is available for download from http://support.advantech.com.tw/support/

1.2 Specifications

Computing System	Chipset	QM67
	CPU	Intel® Core™ i7-2655LE Processor (4M Cache,2.2GHz) Intel® Core™ i3-2340UE Processor (3 M Cache, 1.3 GHz)
	Front Side Bus	Internal CPU
	Memory	Up to 16 GB DDR3 1333 MHz SDRAM
	Graphics Controller	Integrated Intel® HD Graphics
	Operating System	XP, WIN7
	Input Ratings	18Vdc, 5.5A
Display	Display Size	21.5” wide TFT color LCD (16:9)
	Max. Resolution	1920(H) x 1080(V)
	Max. Colors	16.7M colors (RGB 8bits)
	Pixel Pitch (mm)	248.25x248.25
	Viewing Angle	178º/178 º
	Luminance	250 cd/m^2
	Backlight	LED
	LCD MTBF	30,000 Hours
	Contrast Ratio	5000:1
Expansion Slot	Mini PCIe	1 x Mini PCI-E slot
	PCIe /PCI	1 x PCIe (x1) slot
Storage	HDD	1 x 2.5” SATA

I/O Ports	Serial Ports	1 x RS-232 (isolated) and 1 x RS-232/422/485 (isolated) serial port;
	USB 2.0 Ports	4
	VGA/DVI Ports	1 x VGA port
	Speakers (1W)	2
	LAN	2 x Gigabit Ethernet (isolated) interface (RJ-45)
	HDMI	1 x HDMI out
Power Supply	DC Model	AC/DC adapter (Sinpro Model no.HPU101-107)
	Input Voltage	100-240V AC, 47-63Hz, 1.2-0.5A
	Output Voltage	+18 VDC,5.55 A.
Optional Functions	Battery	3S2P 4200mAH, supports 0.5 hr. backup operation
	Smart Card Reader	Complies with ISO7816-1,2,3,T=1 and T=0 protocols
	WLAN	802.11a/b/g/n wire LAN mini-PCIe module & Internal antenna
	RFID	13.56 MHz with ISO-15693 & ISO-14443°/B and active tag function
	Bluetooth	Integrated Bluetooth v2.0 + EDR
Optional Touchscreen	Type	Analog Resistive
	Resolution	Continuous
	Light Transmission	80%
	Controller	RS-232 interface (uses COM6)
	Durability	35 million touches
Certifications	UL/TUV/CB, ANSI/AAMI ES60601-1/EN60601-1/IEC60601-1, CE & FCC Class B certified	
Environment	Temperature	0 ~ 40°C (32 ~ 104°F) (Operating) -20 ~ 60°C (Storage) -20 ~ 60°C (Transportation)
	Humidity	10 ~ 95% @ 40°C (non-condensing) 5 ~ 95% (non condensing) (Storage) 5 ~ 95% (Transportation)
	Pressure	700-1013 hPa (Operation) 375 mmHg to 760 mmHg (Storage) 375 mmHg to 760 mmHg (Transportation)
	Water/dust Resistance	IPX1 compliant IP65 front panel
	Shock Resistance	20G peak acceleration (11ms duration)
Physical Characteristics	Dimensions (W x H x D)	550 x 370 x 65 mm (13.70" x 11.22" x 3.62")
	Weight	7 kg (15.24 lb.)
Platform & utility		XP Professional, Windows 7, SUSI

1.3 Dimensions

Dimensions: 550 x 370 x 65 mm (Unit: mm)

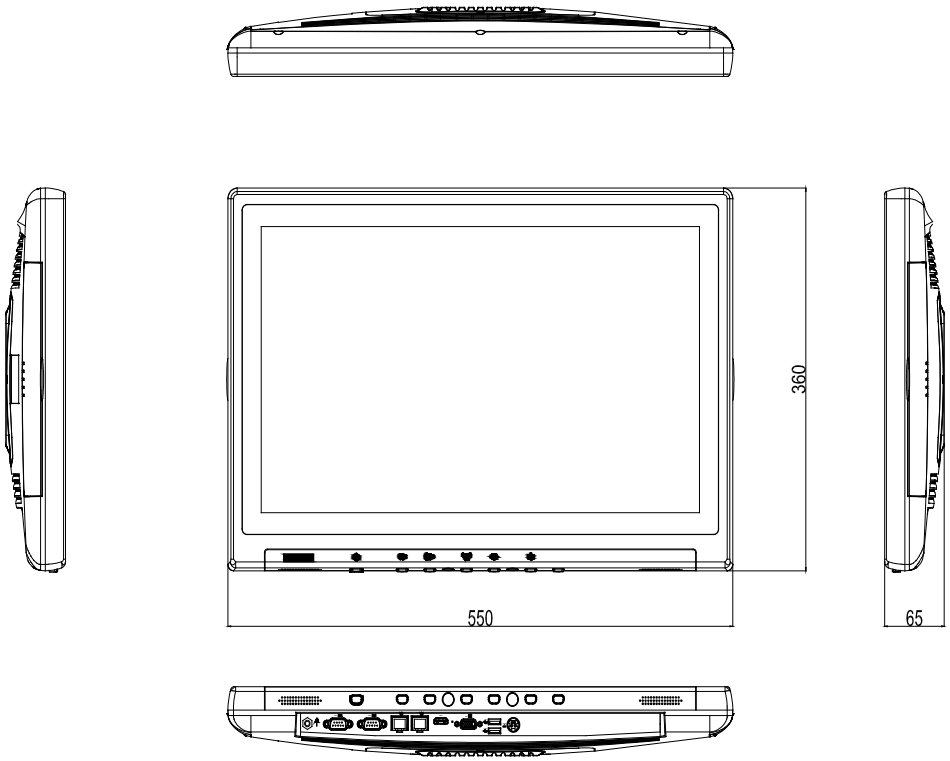


Figure 1.1 Dimensions of the POC-W211

VESA Mounting: 75 x 75 mm; 100 x 100 mm

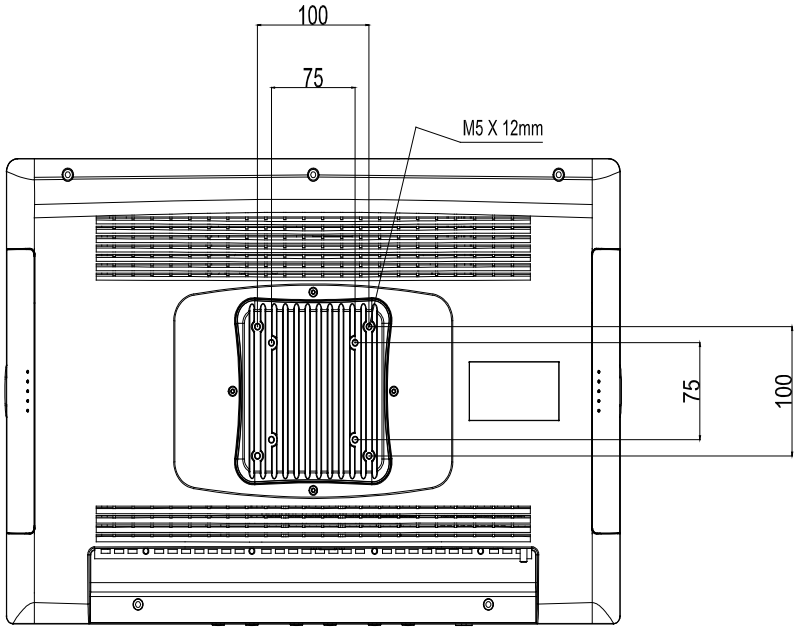


Figure 1.2 VESA Mounting of the POC-W211

Warning! *Use suitable mounting apparatus to avoid risk of injury.*

Figure 1.3 POC-W211 Front Panel

(A) Power
(B.C) Volume Down/Up
(D) Touchscreen Status Control
(E) Read Light Control
(F.G) Brightness Decrease / Increase

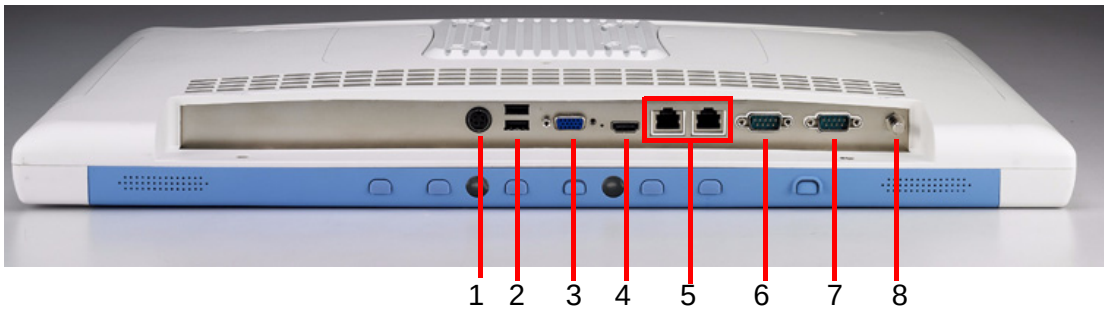


Figure 1.4 POC-W211 Back I/O

(1) Power DC-IN
(2) USB ports
(3) VGA port
(4) HDMI out port
(5) 2 x Gigabit Ethernet interface (RJ-45)
(6) COM2 x RS-232 (isolated) serial port
(7) COM1 x RS-232/422/485 (isolated) serial port
(8) Equipotential Terminal Pin

1.3.1 Optional Modules

- Memory: 2GB, 4GB DDR3 1333 MHz SDRAM
- HDD: 2.5" SATA HDD
- Touchscreen: Analog resistive

1.4 Point-of-Care Terminal Cleaning and Disinfecting

During normal use of the POC (Point-of-Care Terminal) the device may become dirty and should be regularly cleaned.

Steps:

1. Prepare cleaning agent per manufacturer's instructions or hospital protocol.
2. Wipe the POC with a clean cloth that has been moistened in the cleaning solution.
3. Wipe thoroughly with a clean cloth.

Cleaning agent list: chemical disinfectants which have been tested on the POC

No	Cleaning Agents
1	Cidex
2	Isopropyl alcohol
3	Green tinctured soap
4	Windex
5	Alcohol
6	Alcohol 70%
7	Chloride 1000PPM
8	Incidin plus
9	Incidin liquid
10	Mikrozid liquid

Caution!

- *Do not immerse or rinse the POC or its peripherals. If you accidentally spill liquid on the device, disconnect the unit from the power source. Contact your Biomed Department regarding the continued safety of the unit before placing it back in operation.*
- *Do not spray cleaning agents on the chassis.*
- *Do not use disinfectants that contain phenol. Do not autoclave or clean the POC or its peripherals with strong aromatic, chlorinated, ketone, ether, or Esther solvents, sharp tools or abrasives. Never immerse electrical connectors in water or other liquids.*

Chapter 2

System Setup

2.1 A Quick Tour of the POC-W211

Before you start to set up the POC-W211, take a moment to become familiar with the locations and purposes of the controls, drives, connections and ports, which are illustrated in the figures below.

When you place the POC-W211 upright on the desktop, its front panel appears as shown in Figure 2.1.

2.1.1 Front View

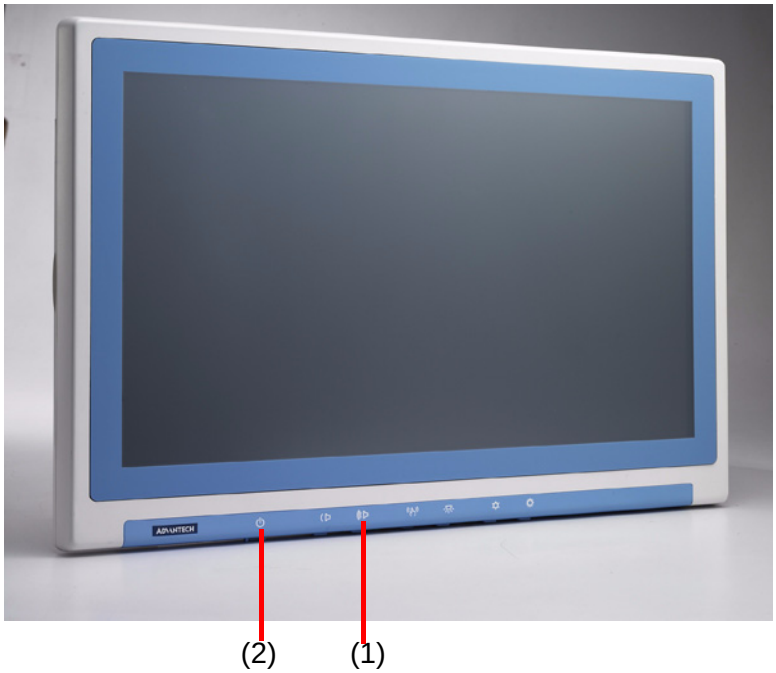


Figure 2.1 Front View of the Point-of-Care Terminal

Front Bezel View

(1) LCD panel with Touchscreen option (Touchscreen Enabled: Green light)

(2) Power symbol w/ indicator light (Power on: Green light)

2.1.2 Bottom View

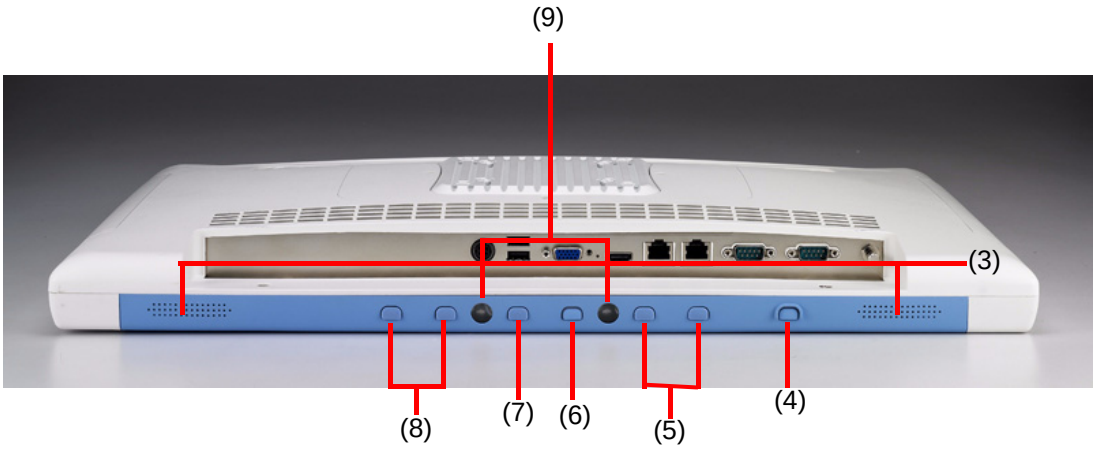


Figure 2.2 Bottom View

Bottom View:

(3) Speaker
(4) Power Button
(5) Volume Up/Down Button
(6) Touchscreen Status Control Button
(7) Read Light Control Button
(8) Brightness Increase/Decrease Bottom
(9) LED for Book Light

2.1.3 Rear View

When you turn the Point-of-Care Terminal around and look at its rear cover, the sunken I/O section is at the bottom of the panel PC, as shown in Figure 2.3 and Figure 2.4 (zoom view). (The I/O section includes various I/O ports, including serial ports, VGA, HDMI, Ethernet port, USB ports and so on.)

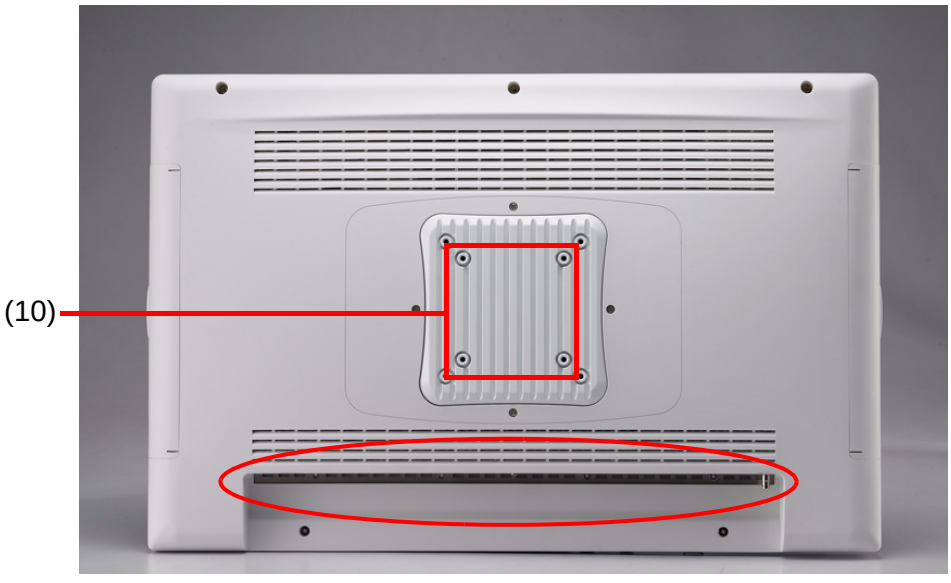


Figure 2.3 Rear view of the Point-of-Care Terminal

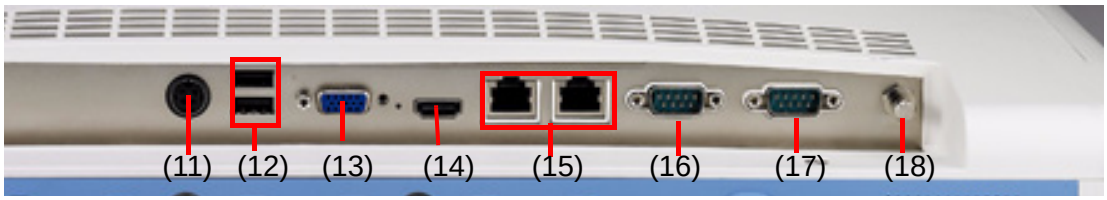


Figure 2.4 Rear view of Multi I/O ports

Rear View:

(10) VESA mounting 100mm x 100mm or 75mm x 75mm
(11) DC-in Jack
(12) USB1-USB2 ports*
(13) VGA port
(14) HDMI port
(15) Ethernet RJ-45 LAN1-LAN2
(16) COM2 serial ports
(17) COM1 serial ports
(18) Equipotential terminal

Note! *Equipotential terminals need a link to hospital ground/earth system before the system boots to protect operator and system.*

2.1.4 Left-side View

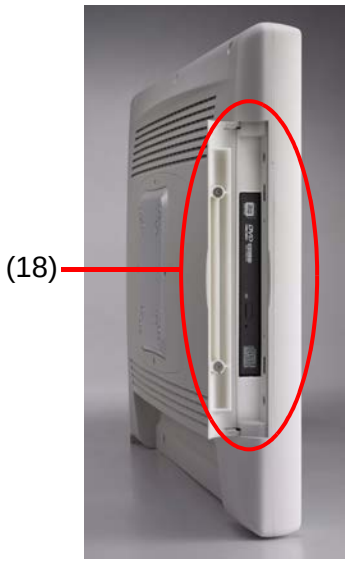


Figure 2.5 Left side View

Left-side View:

(18) RW-DVD-ROM (Optional)

2.1.5 Right-side View

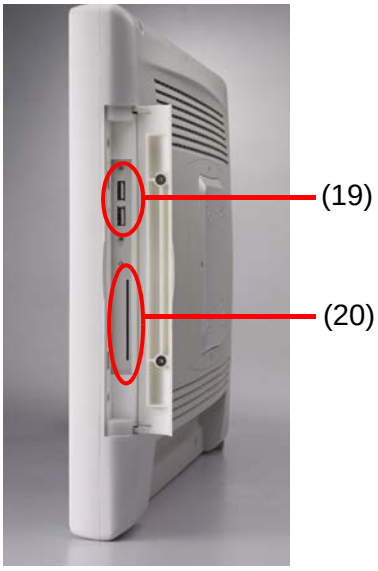


Figure 2.6 Right-side View

Left-side View:

(19) USB3-USB4 ports*

(20) Smart Card Reader (Optional)

2.2 Installation Procedures

2.2.1 Connecting the Power Cord

The POC-W211 can only be powered by a DC power adapter (SINPRO Model no.HPU101-107). Be sure to always handle the power cords by holding the plug ends only.

Follow these procedures in order:

1. Connect the female end of the power adapter to the DC jack of the panel PC. (See Figure 2.7.)
2. Connect the female end of the power cord to the DC power adapter.
3. Connect the 3-pin male plug of the power cord to an electrical outlet.

Warning! *The POC-W211 is supplied by a 100 watt power supply and a special adapter as depicted as above model.*

If medical adaptor is connected to the POC-W211, the customer must ensure legal and regulatory compliance and that the device meets the law and standards compliance requirements of this hardware.

Switching on the power:

Push down the power button on the front panel for POC-W211. (The color indicator turns green)

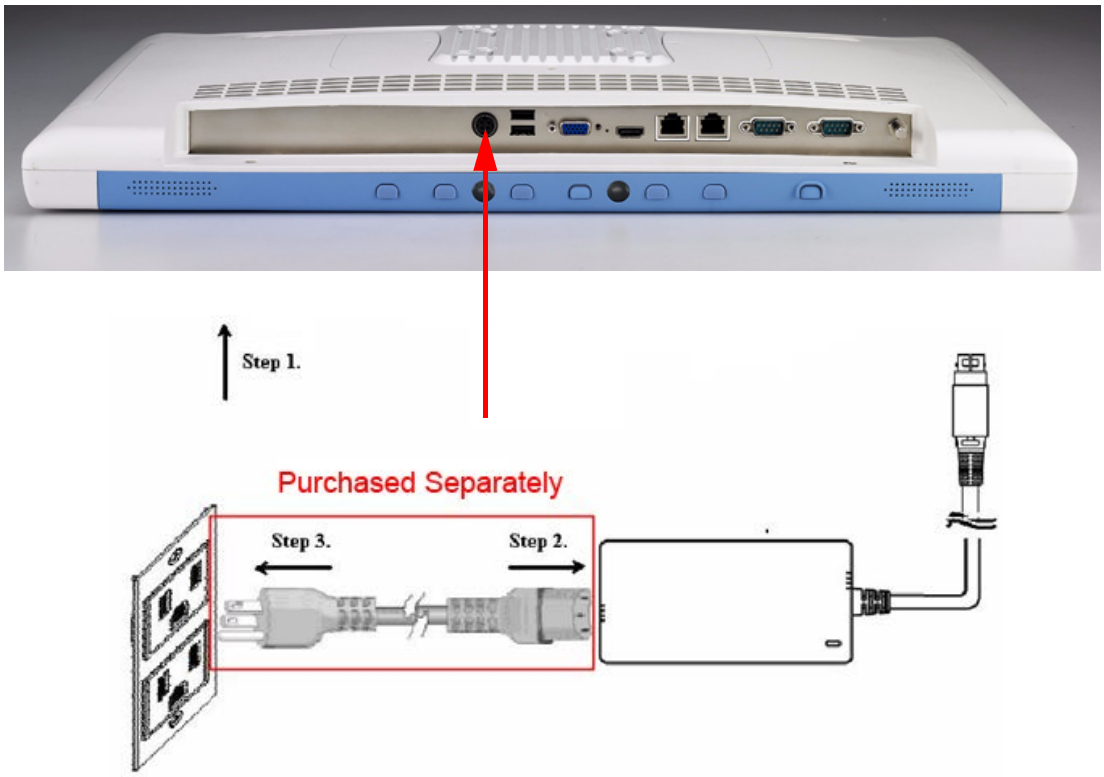


Figure 2.7 Connecting the Power Cord

2.2.2 Connecting the Ground Pin

1. With system ready, find the equipotential terminal on the rear side of the POC. An equipotential terminal is provided to optionally connect to a hospital ground/ earth system

Figure 2.8 POC-W211 Equipotential Terminal Pin

2. Prepare the grounding cable and the other terminal link to hospital ground/earth system.

Figure 2.9 Grounding cable with connector

3. Grounding cable plug with Equipotential Terminal

2.3 Running the BIOS Setup Program

Your POC-W211 was probably set up and configured by your dealer prior to delivery. You may still find it necessary to use the BIOS (Basic Input-Output System) setup program to change system configuration information, such as the current date and time or your type of hard drive. The setup program is stored in read-only memory. It can be accessed either when you turn on or reset the panel PC, by pressing the “F2 or Del” key on your keyboard immediately after powering on the computer.

The settings you specify with the setup program are recorded in a special area of memory called CMOS RAM. This memory is backed up by a battery so that it will not be erased when you turn off or reset the system. Whenever you turn on the power, the system reads the settings stored in CMOS RAM and compares them to the equipment check conducted during the power on self-test (POST). If an error occurs, an error message will be displayed on screen, and you will be prompted to run the setup program.

2.4 Installing System Software

Recent releases of operating systems from major vendors include setup programs which load automatically and guide you through hard disk preparation and operating system installation. The guidelines below will help you determine the steps necessary to install your operating system on the panel PC hard drive.

Note! *Some distributors and system integrators may have already pre-installed system software prior to shipment of your panel PC.*

If required, insert your operating system's installation or setup diskette into the external diskette drive until the release button pops out.

The BIOS supports system boots up directly from the CD-ROM drive. You may also insert your system installation CD-ROM disk into your external CD-ROM drive.

Power on or reset the system by pressing the “F2 or Del” key to boot into BIOS menu and adjust the boot device sequence.

You can also press F12 key when booting; a bootable device popup menu will appear, you can select bootable device that you want. The Point-of-Care Terminal will automatically load the operating system from the diskette or CD-ROM.

If you are presented with the opening screen of a setup or installation program, follow the instructions on screen. The setup program will guide you through preparation of your hard drive, and installation of the operating system.

2.5 Installing the Drivers

After installing your system software, you will be able to set up the Chipset, Graphics, Ethernet, Audio, Touchscreen and AMT functions from your own external CD-ROM drive. All the drivers except the CD-ROM drive driver are stored in a CD-ROM disc entitled "Drivers and Utilities."

The standard automatic installation procedures for installing the Chipset, Graphics, Audio, Ethernet, AMT and Touch drivers are described in Chapter 3.

The various drivers and utilities in the CD-ROM disc have their own text files which help users install the drivers and understand their functions. These files are a very useful supplement to the information in this manual.

For your reference, the directories of drivers on the "Drivers and Utilities" CD-ROM are located as follows:

XP Driver List:

These drivers are located in the driver CD\Driver\XP folder

Please follow the sequence below to install driver.

Install Sequence	Folder Name	Note
1	Chipset	Please install chipset driver first.
2	Graphics	After graphics driver installation, please install Microsoft .NET Framework before reboot.
3	Microsoft .NET Framework 3.5 sp1	
4	LAN	
5	Audio	
6	AMT	
7	Touch	Please install internal resistive touch controller to COM6.
8	Option	Please install optional device in related folder

Note! *These XP drivers are all 32-bit version.*

WIN7 64-bit Driver List:

These drivers are located in the driver CD\Driver\WIN7 64bit folder

Please follow the sequence below to install driver.

Table 2.1: The file directory on "Drivers and Utilities" CD-ROM		
Install Sequence	**Folder Name**	**Note**
1	Chipset	Please install chipset driver first.
2	Graphics	
3	LAN	
4	Audio	
5	AMT	
6	Touch	Please install internal resistive touch controller to COM6.
7	Option	Please install optional device in related folder

Note! *These WIN7 drivers are all 64-bit version.*

Note! *The drivers and utilities used for the POC-W211 panel PCs are subject to change without notice. If in doubt, check Advantech's website or contact our application engineers for the latest information regarding drivers and utilities.*

Troubleshooting

When system behaves abnormally, such as:

1. Failure to power on
2. Failure to power off
3. Power LED ON but no DC power output
4. AC power in and all switches ON, but system doesn't power on

Contact your distributor, sales representative, or Advantech's customer service center for technical support if you need additional assistance. Please have the following information ready before you call:

- Product name and serial number
- Description of your peripheral attachments
- Description of your software (operating system, version, application software, etc.)
- A complete description of the problem
- The exact wording of any error messages
- Symptoms, photo or video if available.

Guidance and Manufacturer's Declaration – Electromagnetic Emissions		
The model POC-W211 is intended for use in an electromagnetic environment as specified below. The customer or the user of the POC-W211 should assure that it is used in such an environment.		
Emissions Test	**Compliance**	**Electromagnetic Environmental Guidance**
RF emissions CISPR 11	Group 1	The model POC-W211 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The model POC-W211 is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Not applicable	

Recommended Separation Distances Between Portable and Mobile RF Communications Equipment and the POC-W211

POC-W211 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the model POC-W211 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the model POC-W211 as recommended below, according to the maximum output power of the communications equipment.

Rated Maximum Output Power of Transmitter W	**Separation Distance According to Frequency of Transmitter m**		
	150 kHz to 80 MHz $d = 1{,}2\sqrt{P}$	**80 MHz to 800 MHz** $d = 1{,}2\sqrt{P}$	**800 MHz to 2,5 GHz** $d = 2{,}3\sqrt{P}$
0,01	0,12	0,12	0,23
0,1	0,38	0,38	0,73
1	1,2	1,2	2,3
10	3,8	3,8	7,3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance *d* in meters (m) can be estimated using the equation in the table above applicable to the frequency of the transmitter, where *P* is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.
NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.
NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Guidance and Manufacturer's Declaration – Electromagnetic Immunity			
POC-W211 is intended for use in the electromagnetic environment specified below. The customer or the user of the model POC-W211 should assure that it is used in such an environment.			
Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environmental Guidance**
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for powersupply lines ±1 kV for input/output lines	Main power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV line(s) to line(s) ±2 kV line(s) to earth	±1 kV line(s) to line(s) ±2 kV line(s) to earth	Main power quality should be that of a typical commercial or hospital environment.
Interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5% *U*T (>95% dip in *U*T) for 0,5 cycle 40% *U*T (60% dip in *U*T) for 5 cycles 70% *U*T (30% dip in *U*T) for 25 cycles <5% *U*T (>95% dip in *U*T) for 5 sec	<5% *U*T (>95% dip in *U*T) for 0,5 cycle 40% *U*T (60% dip in *U*T) for 5 cycles 70% *U*T (30% dip in *U*T) for 25 cycles <5% *U*T (>95% dip in *U*T) for 5 sec	Main power quality should be that of a typical commercial or hospital environment. If the user of the model POC-W211 requires continued operation during main power interruption, it is recommended that the model POC-W211 be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE *U*T is the A.C. main voltage prior to application of the test level.			

Guidance and Manufacturer's Declaration – Electromagnetic Immunity			
The model POC-W211 is intended for use in the electromagnetic environment specified below. The customer or the user of the model POC-W211 should assure that it is used in such an environment.			
Immunity test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environmental Guidance**
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	3 Vrms 150 kHz to 80 MHz 3 V/m 80 MHz to 2,5 GHz	Vrms V/m	Portable and mobile RF communications equipment should be used no closer to any part of the model POC-W211, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. **Recommended Separation Distance** $d = 1{,}2\sqrt{P}$ $d = 1{,}2\sqrt{P}$ 80 MHz to 800 MHz $d = 2{,}3\sqrt{P}$ 800 MHz to 2,5 GHz where *P* is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and *d* is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, [a] should be less than the compliance level in each frequency range. [b] Interference may occur in the vicinity of equipment marked with the following symbol: 
NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			

[a] Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the POC-W211 is used exceeds the applicable RF compliance level above, the POC-W211 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the unit.

[b] Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Chapter 3

Driver Installation

3.1 Introduction

The POC-W211 supports "one key" driver installation. User can just click one button to install all drivers.

Warning! *Please use clean OS to install this auto installation, otherwise, it might cause un-expect error.*

3.2 Automatic Driver Installation

1. Double Click "InstallAll.exe" in D:\Driver\ folder. The Install dialog will appear.
2. Please follow the instruction to install the driver

Chapter 4

Utilities and Hot Fixes

4.1 Introduction

The POC-W211 system needs specific utilities or hot fixes to support special functions.

4.2 Wakeup by External USB Device at S3 Resume (Wakeup)

POC-W211 supports three different sleep (suspend) modes; they are:

1. S1: Power On Suspend: system will stop the clock, turn off LCD backlight, but keep all power on. The user can press any key (by mouse or keyboard) to wake the system up.
2. S3: Suspend to RAM: system will stop the clock, turn off most power rails but not power to memory. It will save all necessary information to memory.
   In this sleep mode, Windows XP needs a hot fix to wake the system up via USB mouse or keyboard. Otherwise, only the power button can be used.
3. S4: Suspend to Disk (Hibernation): system will stop the clock, turn off most power, including power to memory. It will save all necessary information to hard disk. In this sleep mode, the user needs to press the power button to wake the system up.

4.2.1 Installation for Windows XP

This utility is an optional tool for Windows XP only. It needs to be installed only if the USB wakeup function is needed.

Please don't install it on WIN7 OS.

1. Double click the "USBRG.REG" in Driver CD:\Utility\USB folder
2. Click "Yes" to update the registry.
3. Click "OK" to close the successfully installation information window.

Chapter 5

Operation and Safety Information

5.1 General Safety Guide

For your own safety and that of your equipment, always take the following precautions.

Disconnect the power plug (by pulling the plug, not the cord), from your computer if any of the following conditions exists:

- The power cord or plug becomes frayed or otherwise damaged
- You spill something into the case
- Your computer has been dropped or the case has been otherwise damaged
- You suspect that your computer needs service or repair
- You want to clean the computer or screen
- You want to remove/install any parts

5.2 Protecting Your Optical Drive

To keep your optical drive working properly:

- Position your computer so that the drive tray doesn't bump into anything when it opens.
- Close the drive when you're not using it.
- Do not put anything on the drive tray when it is open.
- Do not touch the optical drive lens with your fingers. Do not wipe the lens with a paper towel or other abrasive surface.

5.3 Thermal

The vent hole of the POC-W211 rear cover functions as a cooling air flow inlet and outlet. These air inlets and outlets transfer heat from inside the computer to the cooler air outside. Do not block these holes/vents with any soft material.

When using your POC-W211 system, it is normal for the rear metal heatsink to get warm. The rear metal heatsink of the POC-W211 functions as a cooling surface that transfers heat from inside the computer to the cooler air outside. Do not block this heatsink with any soft material.

Warning! *Do not place your POC-W211 system on a pillow or other soft material when it is on, as the material may block the airflow and cause the computer to overheat.*

5.4 Disconnect the Power

The only way to disconnect power completely is to unplug the adapter power cord. Make sure at least one end of the power cord is within easy reach so that you can unplug the computer when you need to.

Warning! *Your AC cord came equipped with a three-wire grounding plug (a plug that has a third grounding pin). This plug will fit only a grounded AC outlet. If you are unable to insert the plug into an outlet because the outlet is not grounded, contact a licensed electrician to replace the outlet with a properly grounded outlet. Do not defeat the purpose of the grounding plug.*

Warning! *Never push objects of any kind into this product through the openings in the case. Doing so may be dangerous and result in fire or a dangerous electric shock.*

Never place anything on system case before turning off the computer.

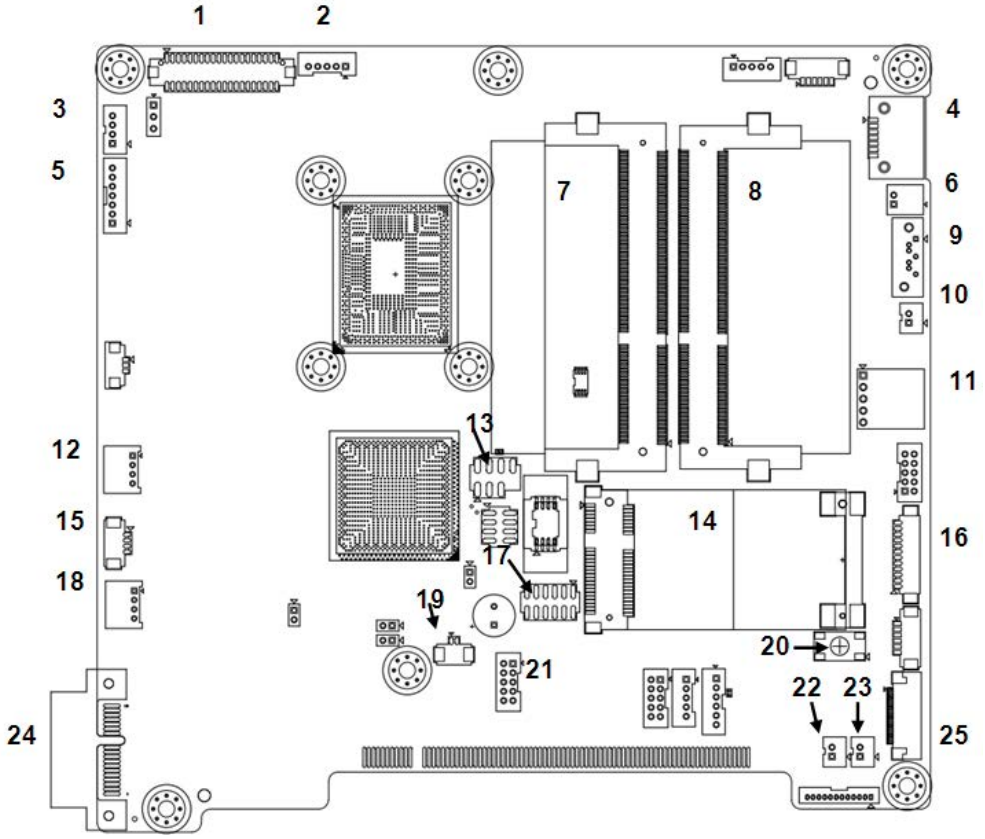
Never turn on your computer unless all of its internal and external parts are in place.

Operating the computer when it is open or missing parts can be dangerous and can damage your computer.

Chapter 6

PCM-8709 Connector Map and Table

6.1 Motherboard Top Side



6.2 Motherboard Bottom Side

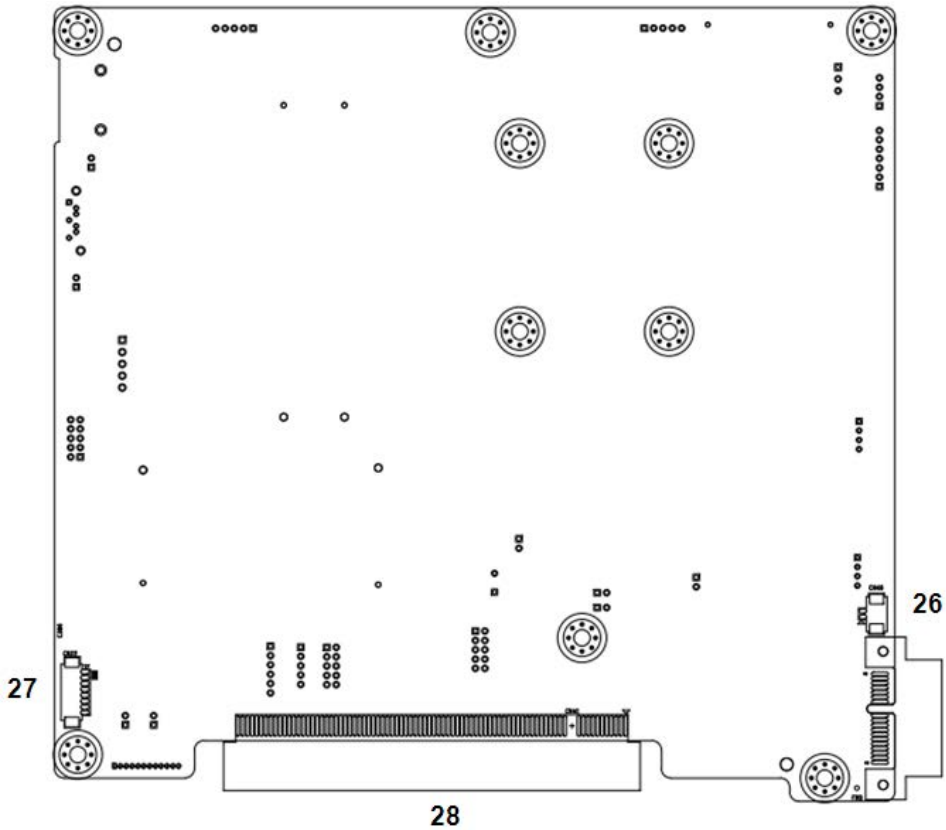
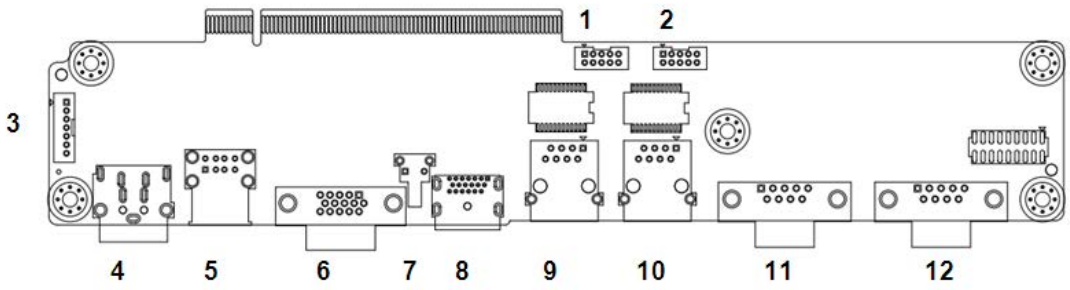


Table 6.1: MB Connector Table	
No.	**Description**
1	LVDS Connector
2	EC SMBUS Connector
3	FAN (Reserved)
4	SATA 0 Connector
5	LED Driver/Inverter Connector
6	SATA 0 Power Connector
7	DDR3 SODIMM A Socket
8	DDR3 SODIMM B Socket
9	SATA 1 Connector
10	SATA 1 Power Connector
11	5-Wire Resistive Touch Connector
12	USB (Reserved)
13	BIOS Flash Port (Reserved)
14	Mini PCIe Socket
15	RFID Connector
16	Front Button Board Connector
17	Port 80 Debug Port
18	Smart Card Connector
19	RTC Battery Connector
20	Power Button (Reserved)
21	USB (Reserved)
22	Right Speaker Connector
23	Left Speaker Connector
24	PCIex1 Slot
25	EC Debug Port (Reserved)
26	12V (Reserved)
27	Bluetooth Connector
28	I/O Board Slot

6.3 I/O Board



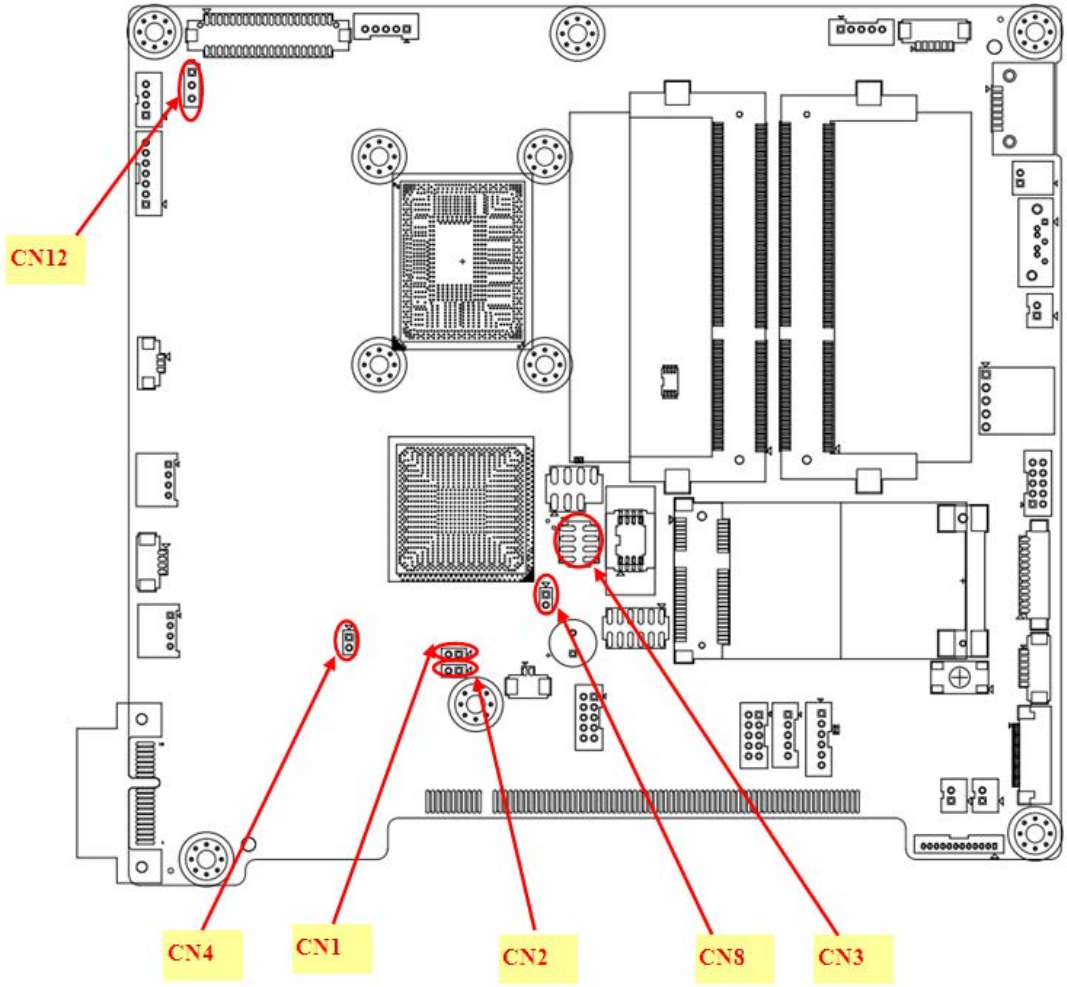
* All connectors are located on the top side

Table 6.2: I/O Connector Table	
No.	**Description**
1	USB Connector (Reserved)
2	USB Connector
3	Internal Backup Battery Connector
4	DCIN
5	USB I/O
6	VGA
7	Reset EC Button
8	HDMI
9	LAN1 (iAMT)
10	LAN2
11	COM2
12	COM1

Chapter 7

PCM-8709 Jumper Settings

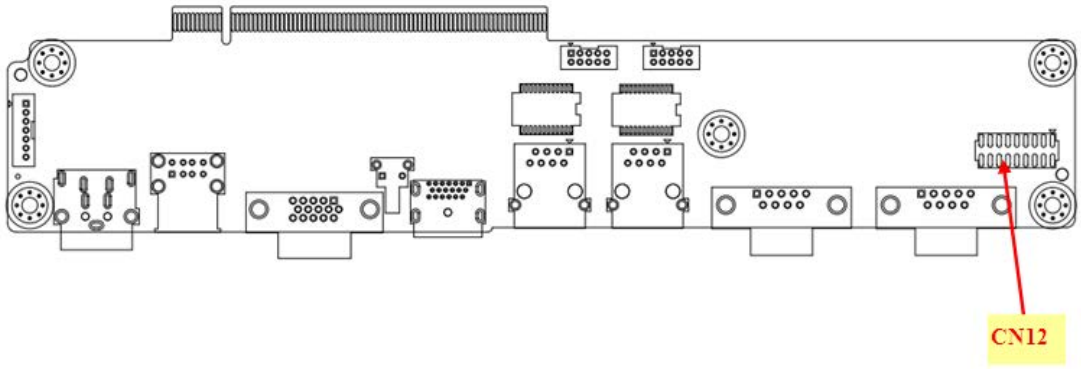
7.1 Motherboard



* All Jumpers located at top side

Figure 7.1 PCM-8709 Motherboard Top Side

7.2 I/O Board



* All Jumpers located at top side

Figure 7.2 PCM-8709 I/O Top Side

Table 7.1: Jumper Settings:	
Setting	**Function**
CN1	Clear CMOS
CN2	Clear ME
CN3	VBIOS Setup
CN4	ME Manufacturing Mode
CN8	System Reset
CN12	LVDS Voltage Select
IO:	
CN12	COM1 RS-232/422/485 output type setting

Table 7.2: CN: Clear CMOS	
Setting	**Function**
(1-2)	Clear CMOS Setup
(No Connect)	Normal Operation (Default)

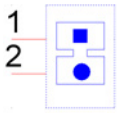
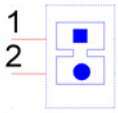


Table 7.3: CN2: Clear ME	
Setting	**Function**
(1-2)	Clear ME Setup
(No Connect)	Normal Operation (Default)



C

Table 7.4: CN3: VBIOS Setup	
Setting	**Function**
(3-4)(5-6)	Panel Resolution: 24-bit single channel 1024x768
(1-2)(5-6)	Panel Resolution: 24-bit dual channel 1280x1024
(1-2)(3-4)(5-6)	Panel Resolution: 24-bit dual channel 1680x1050
(5-6)	Panel Resolution: Manual setting
(3-4)	Panel Resolution: 24-bit dual channel 1920x1080 (Default)
(1-2)	Panel Resolution: 24-bit single channel 1366x768
(1-2)(3-4)	Reserved
(No Connect)	Reserved

Table 7.5: CN3: Select Boot Main Display Setup	
Setting	**Function**
(7-8)	Set VGA as main display at bootup
(No Connect)	Set LVDS as main display at bootup (Default)

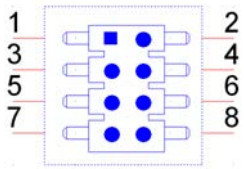


Table 7.6: CN4: ME Manufacturing Mode	
Setting	**Function**
(1-2)	ME Manufacturing Mode
(No Connect)	Normal Operation (Default)

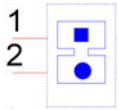


Table 7.7: CN8: System Reset	
Setting	**Function**
(1-2)	System Reset
(No Connect)	Normal Operation (Default)

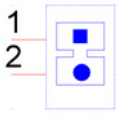


Table 7.8: CN12 (MB): LVDS Voltage Select	
Setting	**Function**
(1-2)	LVDS Power use 5V (Default)
(2-3)	LVDS Power use 3.3V

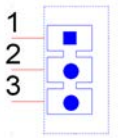
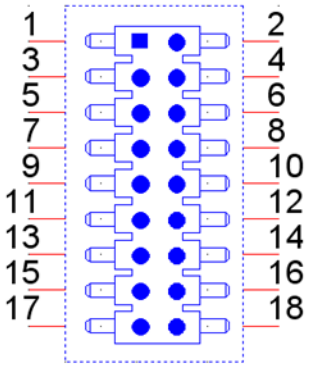
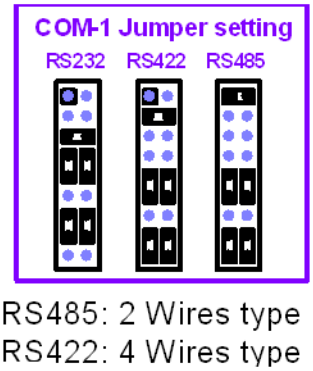


Table 7.9: CN12 (IO): COM1 RS-232/422/485 Output Type Settings	
Setting	**Function**
(5-6), (7-9), (8-10), (13-15), (14-16)	RS-232 (Default)
(3-4), (9-11)(10-12), (15-17)(16-18)	RS-422
(1-2), (9-11)(10-12), (15-17)(16-18)	RS-485





Chapter 8

Front Bezel Button

8.1 Introduction

This section outlines the POC-W211 front button function descriptions.

8.1.1 Front Button Map

Button Description:

Power button	Press this button to power on/off system. When system ON, this icon will become green. The LED will turn off when system is off.
Reduce volume	Press this button to reduce speaker and headphone volume.
Increase volume	Press this button to increase speaker and headphone volume.
Touch disable	Press this button to disable/enable touch function. When touch function is enabled, this icon will become green. When touch function is disabled, this LED will be off.
Read light	Press this button to enable/disable read light.
Reduce brightness	Press this button to reduce LCD backlight brightness.
Increase brightness	Press this button to increase LCD backlight brightness.

Combination Button:

The backlight off function is a special function. When you press both the reduce brightness and increase brightness buttons at the same time for half a second, the LCD backlight will turn off. Pressing both buttons again for a half second will turn on the LCD backlight.

When the backlight is off, the POC-W211 system will still run. There will not be an impact to any operating programs.

This backlight off function can be used in a hospital environment.

If an operator needs to check X-rays in a dark room environment, the operator can quickly turn off the backlight to prevent interference.

An operator can turn off the backlight at night to prevent disturbing a sleeping patient.

Chapter 9

POC-W211 Advanced BIOS Function

9.1 Introduction

This section introduces the advanced functions of the POC-W211 BIOS menu.

1. Power Button Function Enable/Disable
   You can enable/disable power button functions from the BIOS menu.
   If you disable the power button in S0 (System ON) status, the power button will not work. This prevents a user from turning a system off by the power button, preventing accidental shutdown of the system. In this mode software is required to turn off the system.

   BIOS Menu location:

   BIOS Menu - Advanced - Embedded Controller Configuration - Power Button Function

   Enable: Power button function works when system in S0 (System ON) status. (Default)

   Disable: Power button function does not work when system in S0 (System ON) status.

   Press power button 5 seconds or more to trigger power button.

2. Brightness Button Control
   You can enable/disable LCD Backlight button function in BIOS menu.
   If you disable the LCD Backlight button, this button will not work, preventing a user from adjusting LCD backlight luminance. This function can prevent accidentally touching the LCD backlight button and inadvertently adjusting LCD backlight luminance.

   BIOS Menu location:

   BIOS Menu - Advanced - Embedded Controller Configuration - Brightness Button Control

   Enable: Front bezel LCD Backlight adjust button control functions work. (Default)

   Disable: Front bezel LCD Backlight adjust button control functions do not work.

3. Volume Button Control
   You can enable/disable Front Volume button functions in BIOS menu.
   If you disable the Front Volume button, this button will not work, preventing a user from adjusting speaker volume. This function can prevent accidental volume adjustments.

   BIOS Menu location:

   BIOS Menu - Advanced - Embedded Controller Configuration - Volume Button Control

   Enable: Front bezel volume adjust button control functions work. (Default)

   Disable: Front bezel volume adjust button control functions do not work.

4. EC Beep Function

You can enable/disable EC beep function in BIOS menu.

If you disable the EC beep function, EC will not generate a beeping sound when you press front bezel button.

BIOS Menu location:

BIOS Menu - Advanced - Embedded Controller Configuration - EC Beep Function

Enable: Beeping sound when front bezel button pressed. (Default)

Disable: No beeping sound when front bezel button pressed.

5. Setup Popup Menu F12

You can enable/disable F12 key Setup popup menu in BIOS menu.

When you press F12 key in bootup, BIOS will display a bootable device menu and you can select the proper boot device that you want.

BIOS Menu location:

BIOS Menu - Boot - Setup Popup Menu F12

Enable: Press F12 key at bootup displays popup menu (Default)

Disable: Press F12 key at bootup does not display popup menu

Appendix A

POC-W211 VESA Mounting

A.1 Install VESA Mounting

The POC-W211 also provides standard VESA mounting to help system integrators conveniently integrate the panel PC into their system.

Never use mounting brackets except as provided by Advantech to prevent unreliable mounting of the POC-W211. VESA mount installation should be carried out by a professional technician; please contact a service technician or your retailer if you need this service.

Installation instructions follow:

1. First attach wall-mounting to the heat-sink of the POC-W211, securing it in place with the four Phillips-head screws provided.
2. Mount the unit on the wall, stand or other flat surface.

Warning! *Be sure to secure the screws of the mounting bracket tightly. A loose joint between the POC-W211 and mounting bracket may create danger of injury.*

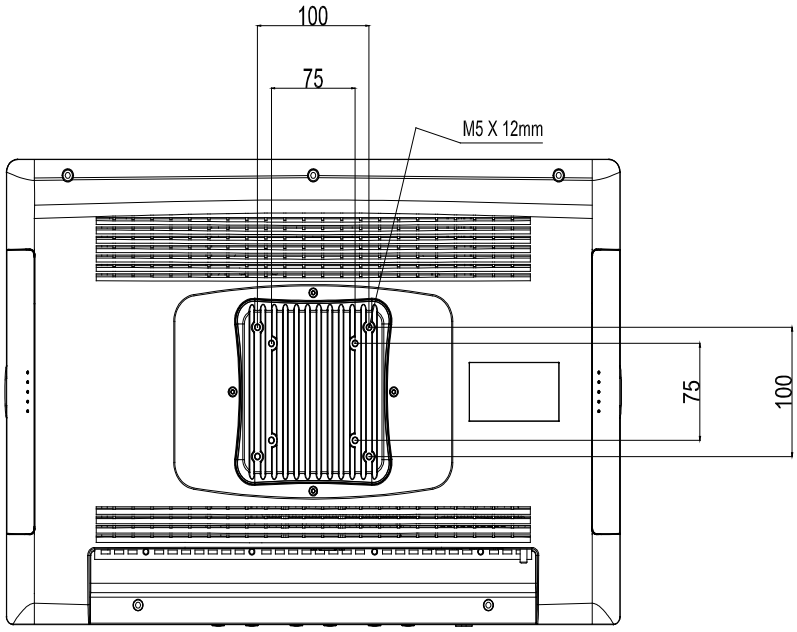


Figure A.1 VESA Mounting 75x75mm, 100x100 mm

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Please verify specifications before quoting. This guide is intended for reference purposes only.

All product specifications are subject to change without notice.