

# Medical Grade Platform

## Point-of-Care Touch Computer

- ✓ Integrated Operating Room
- ✓ Intensive Care Unit
- ✓ Emergency Room
- ✓ Patient Data Management System
- ✓ HMI for Medical Equipment



Room: K203  
 Name: Lela A Betts

Patient History Search

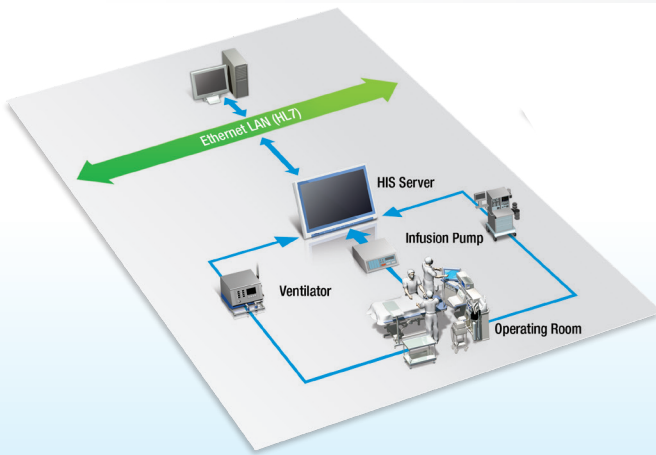
Bed	Name	Prescription	Examination Date	23:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00
KA2881	Steven	Checked	0110	TPR										
KA2882	Mika	Checked	0110	TPR								TPR	FIS	TPR
KA2884	Able	Checked	0110	TPR								TPR	FIS	TPR
KA2885	Allan	Checked	0110	TPR								TPR	FIS	TPR
KA2886	Calla	Checked	0110	TPR								TPR	FIS	TPR
KA2887	Guy	Checked	0110	TPR								TPR	FIS	TPR





# Critical Care

Critical care involves the careful diagnosis and management of life threatening conditions by specially-trained healthcare professionals who use their expertise to provide care for the patient. They access highly sophisticated equipment and computer systems with real-time monitoring of vital data. Care is usually given in an intensive care unit (ICU), emergency department, surgical area or trauma center. The real-time monitoring systems play a critical role to closely tracking patient vital signs and translating patient physiological data into clinical information.

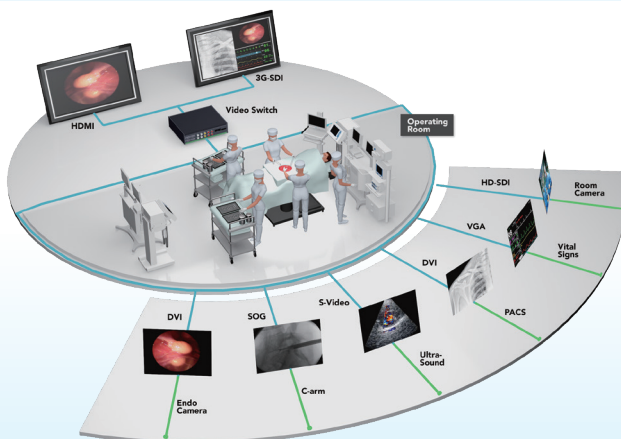
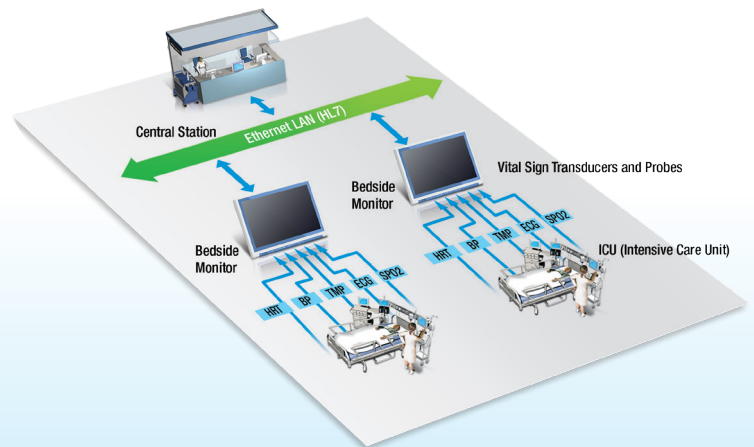


## Peri-operative Information Systems in Operating Arenas

Peri-operative Information Systems support clinical and administrative decision making from pre-operative through intra- and post-operative procedures. A sample solution would be a total anesthesia information system that records and documents each phase of the procedure to produce a comprehensive patient record which is linked to existing patient monitoring equipment, anesthesia machines, and other equipment.

## Clinical Information Systems in Intensive Care

A Clinical Information System integrates patient care applications and data management tools for fast, informed decision-making at the point-of-care. These systems can be found in the ICU, at patient bedside, and are accessible across a hospital network or via the web. They improve access to data and in the ICU, at patient communications; gathering, organizing and processing various information sources which can be used by hospital staff for cost management, patient outcome analysis, quality improvements and to meet regulatory compliance.



## Radiological Application System in the Operating Room

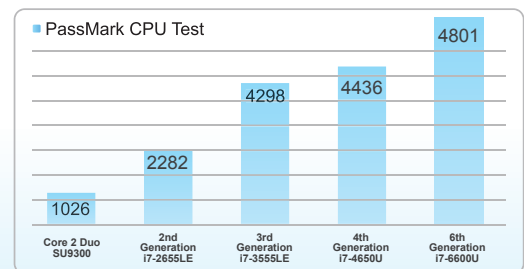
A radiological application system integrates various kinds of medical imaging into one display unit, maximizing flexibility for surgeons to view any 2D/3D data of patients during surgery. Nowadays, medical imaging plays an essential role in surgery because of improved imaging quality and comprehensive imaging methodologies, making medical imaging rather more informative for surgical assessment. The radiological application system is dedicated to visualizing numerous combinations of hybrid image displays, providing a gateway where all archived pre-surgery images stand by for surgeons' timely reference.



## System Performance



POC terminals are always embedded with up-to-date CPUs, ensuring high-performance computing ability and graphic power throughout the product life cycle. POC Series utilizes Intel processors which demonstrate superb performance under extra low power consumption, reinforcing the very core competence of the POCs.



## Infection Control (IP54-Rating & Fanless Design)



The entire exterior smartly encloses the system with water & dust-proof materials. This specialized structure effectively prevents critical parts of the POC from collecting any unintended material, including infectious diseases, thus keeping the POC safe throughout maintenance and usage. This feature is a vital requirement for hospital operating rooms, as well as any other site where aseptic practice is of concern.



IP54 water splash and dust resistant cover

## Flexibility



Advantech spares no expense in durability testing. As a result, POC terminals have been approved using RDT to ensure a 3-year warranty. RDT (Reliability Demonstration Testing) verifications provide a strict way to achieve real product MTBF in a short time by accelerating usage (temperature cycling, thermal shock and combination test). HALT (Highly Accelerated Life Test) testing is also performed to help verify the operational limits of a system and find design and component weakness.





## Reliability (RDT/HALT Test)



Advantech endeavors to meet the specific needs of different healthcare providers. POC terminals have been designed for flexible customization, allowing different configurations of Wi-Fi modules, smart card readers, battery packs, RFID readers, DVD drives, or Bluetooth modules. The POC-W242 is specially extended to 4 PCIe card slots to increase availability for medical-use applications. POC terminals with PCAP technology are designed to enhance light transmission, and 7H hardness rating of the glass improves durability.

## Best Image Solution with IPS Technology



IPS (In-Plane Switching) technology ensures clear, vivid display images, with no color wash. IPS panels are responsive, processing high speed signals without data loss via low-resistance copper wiring. The technology eliminates image distortion while using the touchscreen. Wide-viewing-angle support presents images to viewers from any angle, without blur. And the surface is 7H hard, with a responsive 10 pt. multi-touch interface that works well—even with a gloved hand.

	<b>No Pressure Spot</b> IPS panel maintains a stable image when struck with force.	<b>No Color Wash</b> IPS panel provides a clear image with wide viewing angle.	<b>Faster Response Time</b> IPS panel processes high speed signals for dynamic image without blur.
IPS			
VG			

## Intelligent Power Solution



Advantech hot swappable battery is a mobile power pack equipped with three how-swappable batteries that can support a range of Panel PC in the market. The provision of hot-swappable capabilities enable end users to replace the battery without turning off the device, greatly reducing system interruptions and downtime. Advantech intelligent power solution can support 6~12 operating hours which greatly support each nursing shift.

# Specifications



Category	Attribute	POC-W243	POC-W213	POC-W152	POC-W102
Computing Systems	Chipset	Intel QM87	Intel QM87	Intel QM87	Intel QM87
	CPU	Intel® Core TM i7 6600U Processor (4 M Smart Cache, 3.4 GHz) Intel® Core TM i5 6300U Processor (3 M Smart Cache, 3.0 GHz) Intel® Core TM i3 6100U Processor (3 M Smart Cache, 2.3 GHz) Intel® Celeron TM Processor 3955U (2 M Smart Cache, 2.0 GHz)	Intel® Core TM i7 6600U Processor (4 M Smart Cache, 3.4 GHz) Intel® Core TM i5 6300U Processor (3 M Smart Cache, 3.0 GHz) Intel® Core TM i3 6100U Processor (3 M Smart Cache, 2.3 GHz) Intel® Celeron TM Processor 3955U (2 M Smart Cache, 2.0 GHz)	Intel® Core TM i7 4650U Processor (4 M Smart Cache, 1.7 GHz) Intel® Core TM i5 4300U Processor (4 M Smart Cache, 1.9 GHz) Intel® Baytrail J1900 Processor (2 M Smart Cache, 2.0 GHz)	Intel® Celeron® J1900 Processor (2M Cache, up to 2.42 GHz)
	Memory	Up to 32GB DDR4 1666/2133MHz SDRAM (optional)	Up to 32GB DDR4 1666/2133MHz SDRAM (optional)	Up to 16GB DDR3L 1600MHz (optional)	Up to 8GB DDR3L 1600MHz SDRAM
	Graphics	Intel HD Graphics 520/510	Intel HD Graphics 520/510	Intel HD Graphics 5000/4400	Intel HD Graphics
	Operating System	Win 7, Win 8.1 Industry Pro, Win 10 IoT	Win 7, Win 8.1 Industry Pro, Win 10 IoT	Win 7, Win 8 Embedded Standard, Win 8 Industry Pro, Win 10	Win 10
Display	Size/Display Type	23.8" wide TFT color LCD (16:9)	21.5" wide TFT color LCD (16:9)	15.6" TFT LCD (16:9)	10.1" wide TFT color LCD (16:10)
	Max. Resolution	1920 x 1080 (H x V)	1920 x 1080 (H x V)	1920 x 1080 (H x V)   1366 x 768 (H x V)	1280 x 800 (H x V)
	Max. Colors	16.7M colors (6-bits+A-FRC)	16.7M colors (RGB 8-bits)	16.7 M colors (6-bits+A-FRC)	262k colors (6-bits)
	Pixel Pitch (mm)	0.2745 x 0.2745	0.2745 x 0.2745	0.179 x 0.179   0.252 x 0.252	0.1695 x 0.1695
	Viewing Angle	178°/178°	178°/178°	160/160°   160/160°	170°/170°
	Luminance	250 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>	400 cd/m <sup>2</sup>   300 cd/m <sup>2</sup>	300 cd/m <sup>2</sup>
	LCD MTBF	30,000 Hours	30,000 Hours	30,000 Hours	25,000 Hours
	Contrast Ratio	1000 : 1	1000 : 1	700 : 1   500 : 1	1300:1
Expansion Slots	PCIe	1 x PCIe (x4)	1 x PCIe (x4)	1 x PCIe (x4)	-
	Mini PCIe	2 (1 x full-size, 1 half-size)	2 (1 x full-size, 1 half-size)	2 (1 x full-size, 1 half-size)	-
	M.2	-	-	-	1 x M.2 2230 (for Wi-Fi & others) 1 x M.2 2242 (dedicated for storage) 1 x M.2 2280 (dedicated for storage) (optional)
Storage	Storage 128GB SSD (default) 1 x 2.5" SATA HDD or SSD (optional)	Storage 128GB SSD (default) 1 x 2.5" SATA HDD or SSD (optional)	1 x 2.5" SATA HDD or SSD	1 x 2.5" SATA HDD or SSD	
I/O Ports	Serial Port	2 x RS-232/422/485 (isolated)	2 x RS-232/422/485 (isolated)	1 x RS-232/422/485 (isolated)	M.2 SSD 64GB MLC by default
	USB Port	2 x USB 3.0 ports (rear) 2 x USB 2.0 ports (front) 2 x USB 2.0 ports (rear)	2 x USB 3.0 ports (rear) 4 x USB 2.0 ports (rear & PCIe(x4)slot)	2 x USB 3.0 ports (rear) 3 x USB 2.0 ports (rear)	2 x RS-232 Serial Port (Isolation) 2 x USB 3.0 ports
	VGA/DV/HDMI Port	1 x HDMI-out 1 x Displayport-out	1 x HDMI-out 1 x Displayport-out	1 x HDMI & VGA	1 x HDMI-out
	Speakers (1W)	2 x speakers (2 W) 1 x MIC-in and speaker out	2 x speakers (2 W)	2 x speakers (2 W)	2 x speakers (2 W)
	LAN	2 x Gigabit Ethernet (isolated) interfaces (RJ-45)	2 x Gigabit Ethernet (isolated) interfaces (RJ-45)	1 x Gigabit Ethernet RJ45 (Isolation)	2 x Gigabit Ethernet RJ45 (Isolation)
	Cooling	Fanless	Fanless	Fanless	Fanless
Power Supply	AC / DC Model	AC/DC adapter (Sinpro Model no. HPU101-107)	AC/DC adapter (Sinpro Model no. HPU101-107)	AC/DC adapter (Sinpro Model no. HPU101-107)	AC/DC adapter (Sinpro Model no. HPU101-107)
	Input Voltage	90~260 VAC, 47~63 Hz, 1.35~0.5 A	90~260 VAC, 47~63 Hz, 1.35~0.5 A	90~260 V, 47~63 Hz, 1.35~0.5 A AC	90~260 V, 47~63 Hz, 1.35~0.5 A AC
	Output Voltage	+18 VDC, 5.55 A max. (100 watts)	+18 VDC, 5.55 A max. (100 watts)	+18 V, 5.55 A max.(100 watts)DC	+18 V, 5.55 A max.(100 watts)DC
Optional Functions	WLAN & Bluetooth	Qualcomm Atheros Dual-band (2.4/5GHz), 802.11 a/b/g/n 2Tx/2Rx WiFi & Bluetooth v4.1	Qualcomm Atheros Dual-band (2.4/5GHz), 802.11 a/b/g/n 2Tx/2Rx WiFi & Bluetooth v4.1	802.11 a/b/g/n/ac + Bluetooth 4.1	802.11 a/b/g/n/ac + Bluetooth 4.1
	Barcode Scanner	1D/2D Barcode scanner	1D/2D Barcode scanner	-	1D/2D Barcode scanner
	Smart Card Reader	Complies with ISO7816-1,2,3,T=1 and T=0 protocol	Complies with ISO7816-1,2,3,T=1 and T=0 protocol	Complies with ISO7816-1,2,3,T=1 and T=0 protocol	-
	RFID	13.56MHz, ISO-15693, ISO-14443A, ISO-14443B	6MHz, ISO-15693, ISO-14443A, ISO-14443B	Supports NFCIP-1 & NFCIP-2, ISO18092, ISO21481, ISO14443A/B, ISO15693	Supports NFCIP-1 & NFCIP-2, ISO18092, ISO21481, ISO14443A/B, ISO15693
	Battery	3S1P 1750mAH Supports min. 0.5hr backup operation	3S1P 1750mAH Supports min. 0.5hr backup operation	3S2P 5500mAH Support at least 0.5 hr backup operation	-
	Web Cam	5M Camera, AF (Optional)	-	5M Camera, AF	5M Camera, AF
	Optional Touchscreen Features	Type Projected Capacitive 10-points (AR or AG)	Projected Capacitive 10-points (AR or AG)	P-cap Multi-touch (AR)   P-cap Multi-touch (AR) or Res TS (AG), True Flat Design	True Flat Design, Res
IP Rating	Light Transmission	90%	90%	P-cap 90%   P-cap 90%; Res. TS 75%	80%
	Controller	USB interface	USB interface	USB interface	5-wire
	Durability	Over 100 million touches	Over 100 million touches	50 million touches	over 10 million touches
Certifications	Entire System	IP54	IP54/IPX1	IP43	IPX1
	Front Panel	IP65	IP65	-	-
	CE	Yes	Yes	Yes	Yes
	FCC	Yes	Yes	Yes	Yes
	IEC 60601-1	Yes	Yes	-	-
Environment	EN60601-1	Yes	Yes	Yes	Yes
	UL 60601-1	Yes	Yes	Yes	-
	CCC	Yes	Yes	No	-
Physical Characteristics	Temperature	Operating: 0° C ~ +40° C, Storage: -20° C ~ +60° C	Operating: 0° C ~ +40° C, Storage: -20° C ~ +60° C	Operating: 0° C ~ +40° C, Storage: -20° C ~ +60° C	Operating: 0° C ~ +40° C, Storage: -20° C ~ +60° C
	Humidity	10 ~ 95% @40°C (non-condensing)	10 ~ 95% @40°C (non-condensing)	10 ~ 95% @40°C (non-condensing)	10 ~ 95% @40°C (non-condensing)
	Shock Resistance	20G peak acceleration (11ms duration)	20G peak acceleration (11ms duration)	20G peak acceleration (11ms duration)	20G peak acceleration (11ms duration)
Physical Characteristics	Dimensions (W x H x D)	583 x 386 x 69 mm (22.95" x 15.19" x 2.71")	550 x 360 x 65 mm (21.65" x 14.17" x 2.56")	405.53 x 274 x 60.82 mm (15.96" x 10.78" x 2.39")	267 x 202 x 40 mm
	Weight	7.95 kg	6.9 kg	4.65 Kg	Net 1.85kg; Gross 2.5kg
	VESA Mounting	75 x 75 mm, 100 x 100 mm	75 x 75 mm, 100 x 100 mm	75 x 75 mm, 100 x 100 mm	75 x 75 mm

\* Test results by Passmark BatteryMon V2.1 with a minimum of peripherals connected

## Regional Service & Customization Centers

### China

Kunshan  
86-512-5777-5666

### Taiwan

Taipei  
886-2-2692-6076

### Netherlands

Eindhoven  
31-40-267-7000

### Poland

Warsaw  
48-22-33-23-730

### USA

Milpitas, CA  
1-408-519-3800

## Worldwide Offices

### Greater China

#### China

Toll Free	800-810-0345
Beijing	86-10-6298-4346
Shanghai	86-21-3632-1616
Shenzhen	86-755-8212-4222
Chengdu	86-28-8545-0198
Hong Kong	852-2720-5118

#### Taiwan

Toll Free	0800-777-111
Neihu	886-2-2792-7818
Xindian	886-2-2218-4567
Taichung	886-4-2378-6250
Kaohsiung	886-7-229-3600

### Asia Pacific

#### Japan

Toll Free	0800-500-1055
Tokyo	81-3-6802-1021
Osaka	81-3-6802-1021

#### Korea

Toll Free	080-363-9494
Seoul	82-2-3663-9494

#### Singapore

Singapore	65-6442-1000
-----------	--------------

#### Malaysia

Toll Free	1800-88-1809
Kuala Lumpur	60-3-7724-3555
Penang	60-4-537-9188

#### Thailand

Bangkok	66-2-248-3140
---------	---------------

#### India

Toll Free	1800-425-5071
Bangalore	91-80-2545-0206

#### Indonesia

Jakarta	62-21-7511930/39
---------	------------------

#### Australia

Toll Free	1300-308-531
Melbourne	61-3-9797-0100
Sydney	61-2-9476-9300

### Europe

Toll Free	00800-2426-8080
-----------	-----------------

#### Germany

Munich	49-89-12599-0
Düsseldorf	49-2103-97-855-0

#### France

Paris	33-1-4119-4666
-------	----------------

#### Italy

Milano	39-02-9544-961
--------	----------------

#### Benelux & Nordics

Breda	31-76-5233100
-------	---------------

#### UK

Reading	44-0118-929-4540
---------	------------------

#### Poland

Warsaw	48-22-33-23-740 / 41
--------	----------------------

#### Russia

Toll Free	8-800-555-01-50
Moscow	7-495-644-0364
St. Petersburg	7-812-332-5727

### Americas

#### North America

Toll Free	1-888-576-9668
Irvine, CA	1-949-420-2500
Milpitas, CA	1-408-519-3898
Cincinnati	1-513-742-8895

#### Brazil

Toll Free	0800-770-5355
Saude-São Paulo	55-11-5592-5355

#### Mexico

Toll Free	1-800-467-2415
Mexico City	52-55-6275-2777

# ADVANTECH

Enabling an Intelligent Planet

[www.advantech.com](http://www.advantech.com)

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

All product specifications are subject to change without notice.

No part of this publication may be reproduced in any form or by any means, electronic, photocopying, recording or otherwise, without prior written permission of the publisher.

All brand and product names are trademarks or registered trademarks of their respective companies.

© Advantech Co., Ltd. 2018



8600000455