Advantech
in Perspective
2017

Enabling an Intelligent Planet

ADVANTECH

Advantech
at a Glance

Advantech defines its brand mission as

"Enabling an Intelligent Planet",

to empower innovative technologies and solutions.

- **Headquarters** / 總部
  Taipei, Taiwan (1983)
  About 8,000 pp.

- **Revenue** / 營收
  USD $1,293M (2016)

- **Service Field** / 領域
  Industry 4.0, Industry IoT
  Smart City (Medical、Retail、Logistics)
  Industrial Equipment Manufactures

- **Market Position** / 市占
  No. 1 (29%) in Industrial PCs

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ADVANTECH

Milestones to Success

Opening of China Kunshan Manufacturing Center

Smart City and IoT Solutions

30th Anniversary, Reached 1B USD

Enabling an Intelligent Planet as Corporate Vision

Opening of Kunshan A+TC & Linkou Campus

Revenue in millions, USD

282 · 482 · 698 · 920 · 1180 · 1201

Year 2001-2015

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 — 2020

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Worldwide Presence

2 Manufacturing Sites
4 Logistics Center
15 Repair Centers
23 Countries

North America
31%

Europe
15 %

Eindhoven

Breda
Berkshire
Paris
Warsaw
Düsseldorf
Amberg
Munich
Milano
Moscow

China
26 %

N. Asia
6%

Milpitas

Irvine
Cincinnati
Mexico

Kunshan
Xi'an
Chengdu
Shenzhen
Beijing
Shanghai
Seoul
Osaka
Taiwan
7 %
Taipei
Hong Kong

Bangalore
Bangkok

**SAP &
Intercontinental**
7%

Kuala Lumpur
Singapore
Jakarta

Asia

Itajuba
Sao Paulo

Sydney
Melbourne

Affiliates/M&A
4%

Tier-1 E2E
4%

Region	2016 PP.
Taiwan	3,500
China	3,000
America	600
Europe	400
Others (AJP, AKR, SAP)	300

● Regional Service Center / ● Branch Office

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Best Taiwan Global Brands 2016

Interbrand

01 ASUS IN SEARCH OF INCREDIBLE	-2% 1,748$m
02 TREND MICRO	+3% 1,360$m
03 旺一旺	-7% 1,029$m
04 中國信託 CTBC	New 506$m
05 GIANT	+4% 476$m
06 ADVANTECH	+13% 436$m
07 acer	-26% 426$m
08 MERIDA	+4% 400$m
09 MEDIATEK everyday genius	+6% 377$m
10 hTC	-18% 373$m
11 85°C Daily Cafe	+17% 348$m
12 MAXXIS	-9% 317$m
13 SYNNEX	-9% 309$m
14 中租控股	+6% 233$m
15 DELTA	+13% 225$m
16 統一企業	+12% 199$m
17 JOHNSON	+5% 152$m
18 Transcend good memories start here	-5% 142$m
19 CHLITINA 克麗緹娜	+19% 95$m
20 ZYXEL 合勤科技	+4% 93$m

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World Market Share Industrial PCs

Supplier	Ranking	%
Advantech	1	**29.0%**
Siemens	2	**9.0%**
Beckhoff	3	6.0%
Kontron	4	5.5%
American Industrial Systems	5	4.5%
Other Suppliers		46.0%

Advantech IPC WW Market Share **29%**

Source: IHS – The World Market for industrial PCs 2016 Edition

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Advantech Strategic Business Groups

Embedded-IoT

Embedded Core & IoT Modules

- Computing on Modules
- Single Board Computers
- Industrial Motherboards
- Embedded Box Computers
- Gaming Solutions
- Industrial Displays
- Industrial Flash Storage (SQFlash)
- Embedded Wireless Modules (M2.COM)
- WISE-PaaS & Cloud Software
- ARM/ RISC Computing
- Modular Board Design Services

Allied DMS

Networks & Communications

- Telecom & Mission Critical Systems
- Enterprise Network Platforms
- Network & Embedded Switches
- Video Broadcasting Solutions

Applied Computing

- Industrial Mobile Computing
- Applied Computing DMS
- Service-IoT DMS

Allied Purchasing Services

- Components (CAPS)
- Peripherals (PAPS)

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Industrial-IoT

Industrial Automation

- Industrial I/O & Controllers
- Automation Computing & HMI
- Motion Controls & Machine Vision
- Remote IoT Devices (WISE)
- WebAccess+ Software
- iFactory (Industry 4.0) Solutions
- Machine Automation Solutions
- Energy & Environment Solutions

Intelligent Systems

- Industrial Computers
- Industrial Servers & Storage
- Intelligent Video Solutions
- Transportation Solutions

iConnectivity

- Network Edge Solutions
- Industrial Switches
- Industrial Wireless Devices
- Industrial Cellular Routers

Service-IoT

Digital Healthcare & Intelligent Hospital

- Medical Computing & Tablets
- Intelligent Hospital Solutions

Intelligent Retail & Hospitality

- iRetail Platforms
- Intelligent Retail & Hospitality Solutions
- Digital Signage Solutions

Digital Logistics & Fleet Management

- In-Vehicle Computing
- Digital Logistics & Fleet Management Solutions

Smart City & iBuilding

Advantech Taiwan Manufacture Center

Phase 2
Production, Hub

Phase 3
TBD

Phase 1
R&D, PM, RMA,

System Employee = 110
Board Employee = 474

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A+TC Collaboration RD Center
No. 887, Han-Pu Road, Yu-Shan, Kun-Shan Jiang Su, China

AKMC

10 Minutes by Walk

Office Building

Training Building

Training Building

SQUARE

FIELD

GRASS

Land Area = 26,667 M²
Floor Area = 37,320 M²

Advantech Kunshan Manufacture Center

No. 600, Han-Pu Road, Yu-Shan, Kun-Shan Jiang Su, China

Factory 2
System factory

Dormitory D

Factory 1
Board factory

Dormitory D

Factory 3
Chassis factory

Office Building O

Factory 4
CTOS

339 Provincial Road

HanPu Road

Land Area = 66,667 M²
Floor Area = 105,000 M²

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Advantech Manufacturing Certifications

ISO9001 (General Quality)

ISO13485 (Medical Quality)

TL9000 (Telecom Quality)

ISO14001 (Environment)

OHSAS18001 (Health & Safety)

SONY GP (Green Partner)

IECEx QAR (Explosive Atmospheres Application)

ISO9001
Original Certification: 1993/11/20
Latest one valid from
2017/02/02 to 2018/09/15

ISO13485
Original Certification: 2005/7/12
Latest one valid from
2016/10/28 to 2017/07/12

TL9000
Original Certification: 2011/2/3
Latest one valid from
2017/02/07 to 2018/09/15

ISO14001
Original Certification: 1997/11/4
Latest one valid from
2015/2/24 to 2018/2/24

OHSAS18001
Original Certification: 2005/12/16
Latest one valid from
2015/2/24 to 2018/2/24
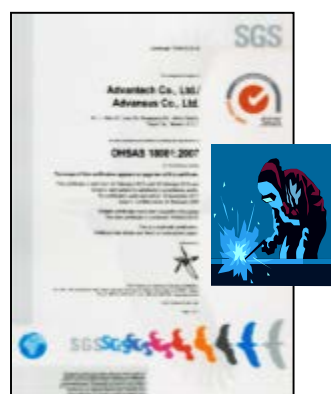
SONY GP
Original Certification: 2012/9/101
Latest one valid from
2016/8/25 to 2018/08/31

IECEx QAR (DH & LK)
Original Certification: 2015/8/27
Latest one valid from
2017/03/07 to 2018/07/31

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Global Service and Support Centers

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ADVANTECH iHealthcare

Advantech

iHealthcare Introduction

Digital Healthcare
Engaged with Smarter Hospitals

Point-of-Care

Integrated Operating Rooms

Telehealth

Intelligent Wards

Closed Loop Medication Administration

Outpatient Services

Medical Computers and Medical Displays

Medical Tablets

Healthcare Information Systems

Medical Carts and Telemedicine Solutions

Hospital Self-Service Systems

Capture Cards

Vital Sign Devices

Medical Tablets Accessories

Handset and Card Readers

Smart Battery Kit

Telemedicine Set

Barcode Readers

eMedication Box

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ADVANTECH | iHealthcare

Enabling a Smarter Hospital

Telemedicine
Now, healthcare can be delivered without the restriction of distance.

CLMA
Reduce the risk of medication error

Big Data Analytics
All the patient information are saved in the cloud for big data analytics

Integrated Operating Rooms
Digital documentation, teleconsutation and surgery demonstration are all possible with latest technology.

Intelligent Wards
Digital and virtual technologies allows patients to be safer and more comfortable

Self Check-In Services
Patients can make appointment at home and do self-check when arrive hospital.

Intelligent Nurse Station
Care givers benefits from integrated information, like vital signs, EMR, emergency alarm, wards status…

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ADVANTECH **iHealthcare**
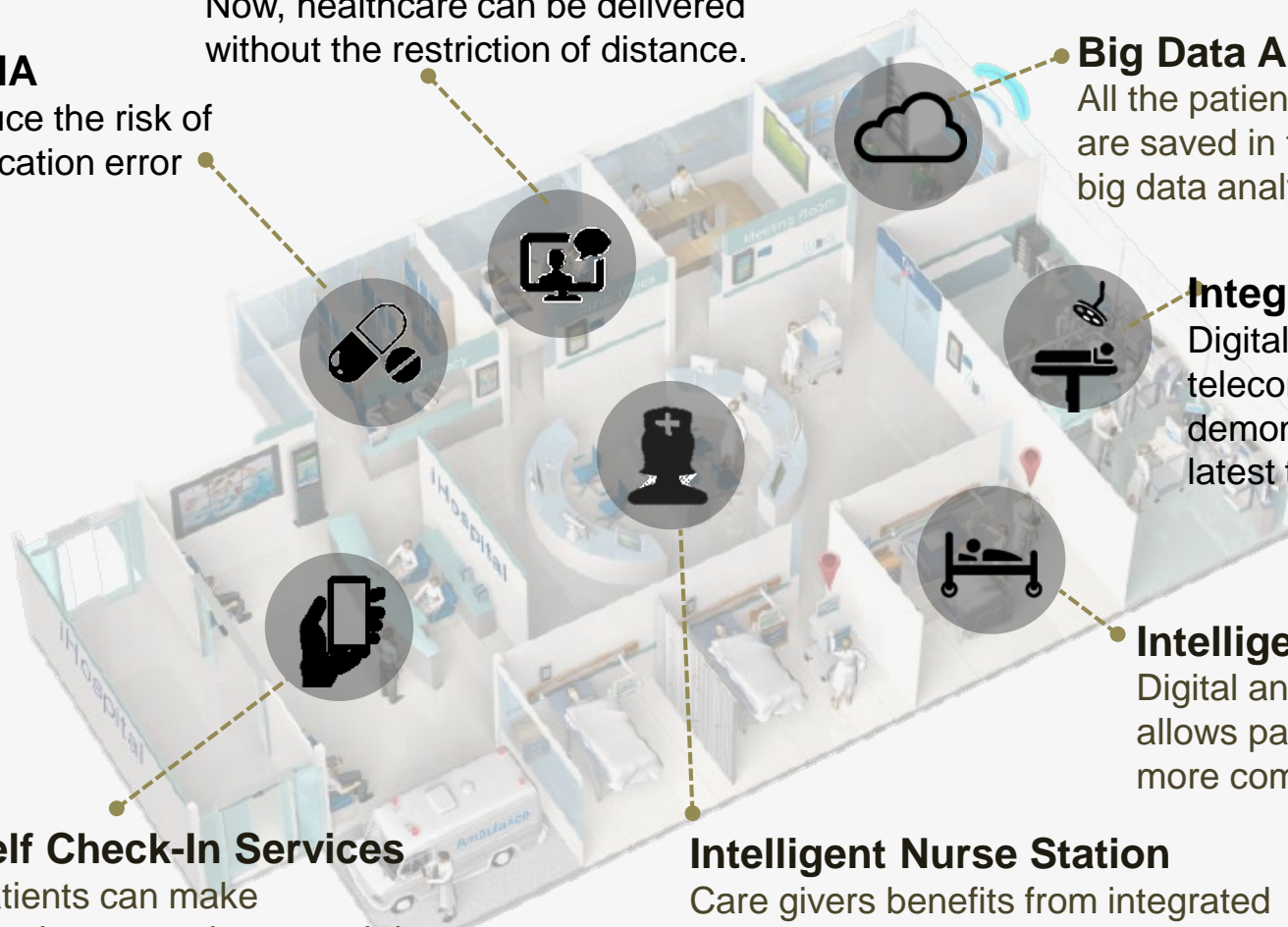
POINT-OF-CARE TERMINALS

Efficient Operations Management

Enabling an Intelligent Planet

ADVANTECH iHealthcare

Point of Care Terminals
Skylake Series *powered by the latest 6th generation Intel CPU*

POC-S199

POC-W243

POC-W213

- Cutting-Edge Platform Delivers High-Performance Computing
- Certified to Medical Safety Standards
- Enhanced Data Security Mechanisms
- 4 kV ESD Protection for I/O Parts *(optional)*
- Internal Power Supply Unit and External Solution
- Enhanced Infection Control
- Display / Video Output
- High Reliability and 3-yr Extendable Warranty
- Flexible I/O Expansion and Customization
- Support Remote Management

| Storage | Smart Card Reader | iDoor Module | PCIe x 4 | Mini PCIe | 4 kV Protection | Backup Battery | RFID Module | DICOM Module | Bluetooth Module |

Point of Care Terminals

Controller AIO

POC-W102

POC-128

POC-W152

PDMS AIO

POC-W(P)213

POC-SP199

Radiology AIO

POC-W243

Rich Accessories
- Wi-Fi / BT
- RFID
- Battery
- Camera
- Smart Card Reader
- Barcode Scanner

Front Panel IP65 Compliant
- Liquid/dust Proof
- Chemical Resistance
- Easy to clean

Entire system IP54 compliant for 21" and 24"

Fanless Design
- No dust accumulated
- No bothering noise
- Friendly to healthcare environment

Rich I/O to integrate with devices
- Plenty of PCIe expansion slots
- Optional isolated COM/LAN/USB ports for models over 21"

IPS LCD Panel
- Bezel-less design for most models
- Vivid & clear picture
- No color wash

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ADVANTECH iHealthcare

Point of Care Terminals Applications

Controller AIO

POC-W102

POC-W152

POC-128

PDMS AIO

POC-W(P)213

POC-SP199

Radiology AIO

POC-W243

Cosmetic Treatment

Operation Panel

Endoscope Control Center

PDMS

PDMS

MRI Image viewing

LIS panel

Neurological Center

Patient Monitroing

ICU PDMS

Data analysis

INTEGRATED OPERATING ROOMS

Optimized OR Workflow

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ADVANTECH iHealthcare

iOR Key Offerings

AKostec

32" FHD
27"FHD
27"UHD
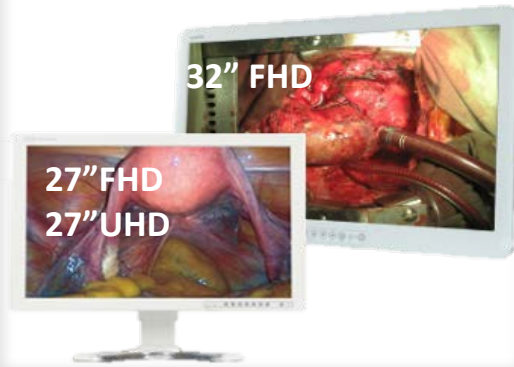
- Wide screen Full/Ultra HD resolution
- Environmentally-friendly LED backlight
- 14-bit video image processing
- Wide connectivity including 3G-SDI and single-fiber interface
- Antibacterial lionizer-inside monitor
- Brightness leveling technology (BLT)

AVAS-4000

A Powerful and Integrated Image Hub

Compact design:
  278 X 230.5 X 114.9 mm
Gap free:
  Overlap housing, one-piece design
Easy fan cleaning:
  Detachable mesh to keep dust out
Easy to repair:
  Tool-free solution when opening the chassis

AVAS-2000

Video Switching in Digital OR

- **Fast**
  - Switches instantaneous
  - Streams video with low latency < 4ms
- **High quality images**
- **Simple**
  - One cable
  - Very scalable
  - Exchangeable
- **Open software for easy integration**
- **Low total cost of ownership**

BRANDING

Surgical Display
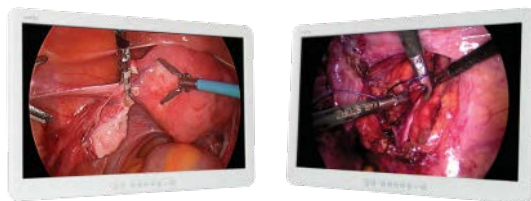
Diagnostic Display

Clinical Review Display

Medical Equipment KA/ODM

Ultrasound Imaging

Special Modality Imaging

Open Frame Solutions

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ADVANTECH iHealthcare

What is AVAS-OR ?

Advantech	Video	Archiving	and Streaming
A	**V**	**A**	**S**

AVAS Offering Content

*A*dvantech *V*ideo *A*rchiving and *S*treaming

Traditional OR · Hybrid OR · Surgery Live Streaming

Traditional OR Facility Upgrade · Flexible Operative Field Recording

Meeting Room · Auditorium · Surgery Demonstration

Remote Advisor · Two-Way Communication

In Field

Out Field

Out Field

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ADVANTECH **iHealthcare**

AVAS Offering Content in Products

*A*dvantech *V*ideo *A*rchiving and *S*treaming

AVAS-2000
NDCoder
OR Video Integration Over IP with Zero Latency

→Video over IP for Streaming

AVAS-4000
Streaming Console & VMS Server
A Powerful and Integrated Image Hub

→Box PC for OR Video Management

AVAS-6000
Operative Field Mobile Workstation
A versatile workstation for surgical demonstration and consultation

→Workstation for OR Upgrade

AVAS-4000整合处

AVAS-2000整合处
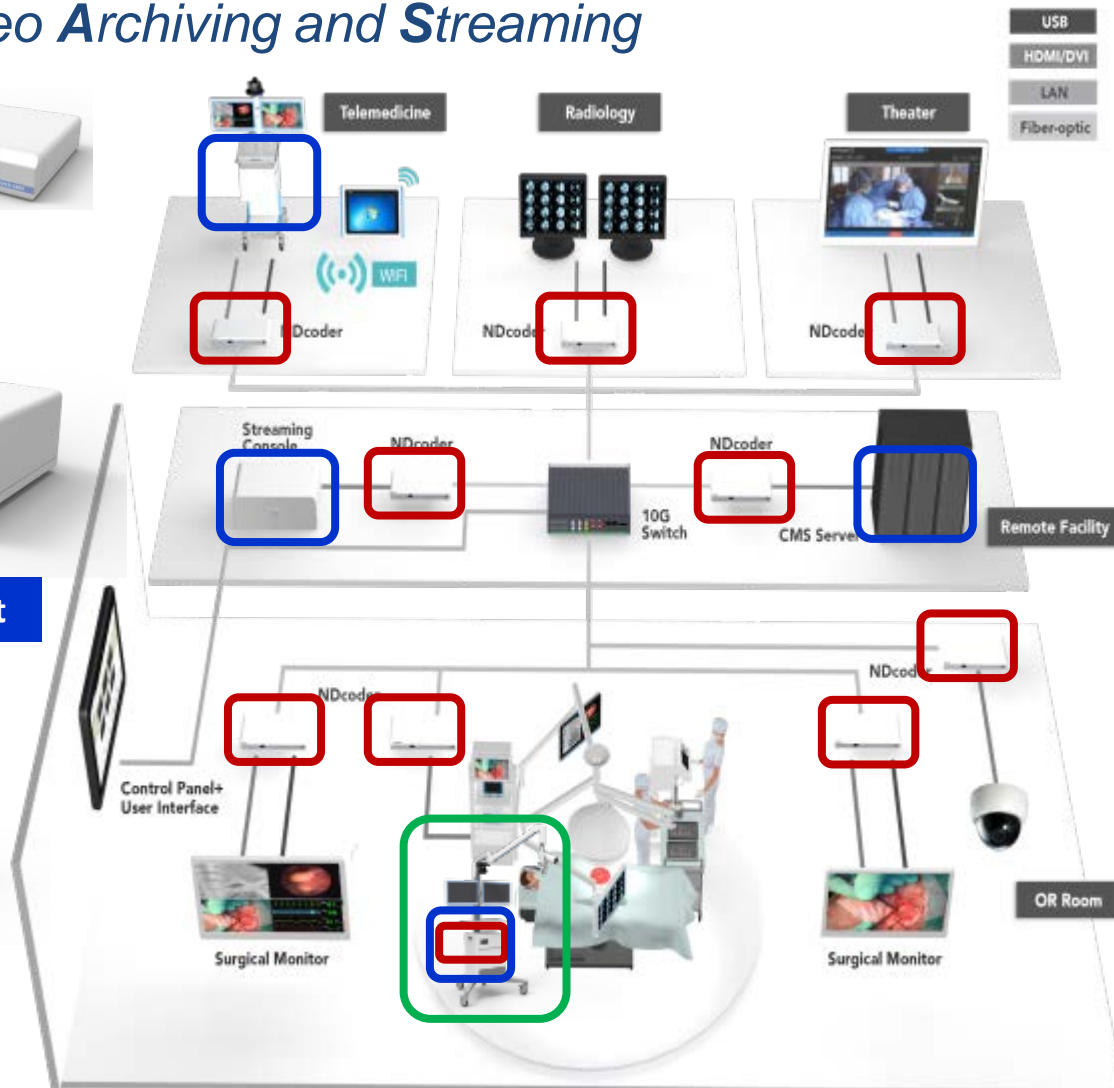
INTELLIGENT WARDS

Improved Patient Experience

ADVANTECH iHealthcare

iWard Key Products

Bedhead HIT

HIT-W121

HIT-W101C

Bedside HIT

HIT-W183

HIT-W153

IP Nurse Call

HIT with Optional Accessories

Benefit for Patients
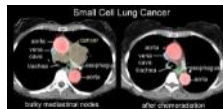
16:9 Wide screen	HIS/PACS	Remote	IP Phone	Digital TV

Benefit for Medical Staff

Barcode	Smart Card Reader	RFID / NFC	MSR	Finger Scanner

iWard Key Products Applications

Bedhead HIT

HIT-W101C

HIT-W121

Bedside HIT

HIT-W153

HIT-W183

IP Nurse Call

HIT with Optional Accessories

Bedhead system

Bedhead system

Bedside Information System
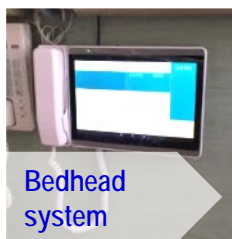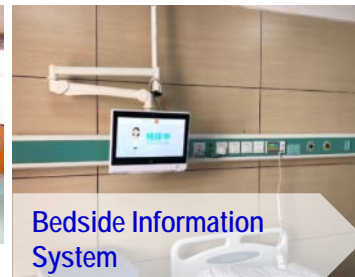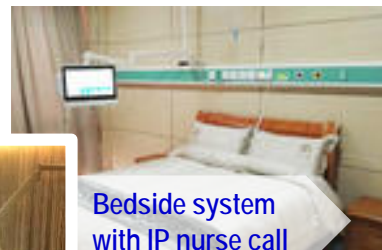
Bedside system with IP nurse call
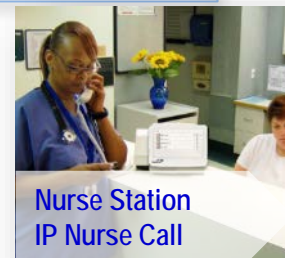
Nurse Station IP Nurse Call
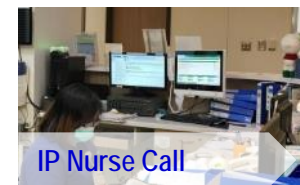
IP Nurse Call
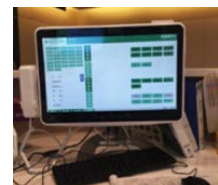
Bedhead Information Terminal

Attention :
Please keep body clean and oral dry

ADVANTECH iHospital

Medical record No: 95611088

Steven.Pan

VS: David.Huang
R: Jimmy.Lin
RN: Mary.Wu
Admission date: 2015/09/10
Spoken Language: EN/JP/CH

Male   Date of Birth : 1985/10/10   Age : 30

Bed Number
301-7

EMR   **Vital Sign Collection**   **Medication Admin**   **Nurse Call**

➢ Skip Entertainment
➢ 100% Reserved for Patient /Hospital Info.
  E.g.. EMR, HIS, PAS.. Key info for patients
➢ Implement with Nurse Call / LED alarm
➢ Vital Sign Data Sync
➢ **PoE** Support
➢ echo cancellation VOIP handset
➢ RFID / Wifi / BT / Smart Card Reader

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ADVANTECH iHealthcare

Bedside Information Terminal

Surgical Image	Endoscopic Image	EMR	Vital Sign Collection	Tele-medicine	Medication Admin	Nurse Call

IP Nurse Call Terminal

Intelligent Nurse Station

- 12" or 15" HIT w/Handset
- PCAP touch
- Background noise cancellation handset
- PoE Support
- Flexible Customization
- LED alarm indication, UL1069 compliance

Intelligent Patient Centric Care

- HIT Bedside Terminal
- HIT Bedhead Termial

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ADVANTECH iHealthcare

Medical Tablets for iWard Applications

AIM-55

Medical Tablet

- **8" Display** supporting **FHD** resolution
- With both **Windows and Android** platform options
- **Long battery life** (up to 8 hours operating time
- Flexible **add-on module** and docking station options fitting wide variety of application uses
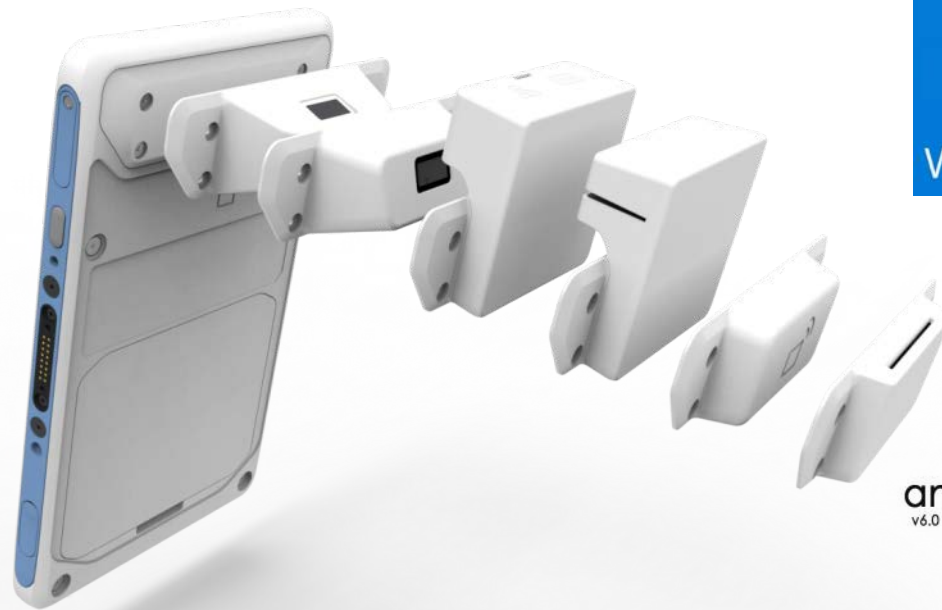- Certified with latest medical standard

ADVANTECH iHealthcare

AIM-55 Applications

Windows 10

android
v6.0 Marshmallow

Long-Term Care — *Scenario*

Panel mount — *Scenario*
AIM + Smart Bed

Cart Stand
AIM-55 + AMiS
Mobile Workstation

Pole mount — *Scenario*

ADVANTECH iHealthcare

CLOSED LOOP MEDICATION MANAGEMENT

Enhanced Medication Safety

Enabling an Intelligent Planet

ADVANTECH iHealthcare

Still Having Troubles with Your CoW?

No more 'COW' wrestling

AMiS

Advantech **M**edical & **i**ntelligent **S**tation

- ✓ Means "good friend " in French

- ✓ A powerful assistant to accompany caregivers

Digital Healthcare – **AMiS**
Enabling Mobile Point-of-Care

A computer integrated medical cart to optimize patient care process and increase hospital workflow

Advantech Mobile Device—AMiS-50

The ultimate mobile workstation that will become your best friend at work

Intuitive dashboard design
This intuitive design with power status, battery consumption, and the height control buttons enhance the overall user experience

Arch-shaped handle
Comfort Grip Front & Rear Handles eases the movements. No sharp edges reduce the risk of getting hurt

LiFePO$_4$ Battery System Enhances Intelligent Power Management
The LiFePO4 battery is lightweight, long-lasting, and can be managed remotely via AMiS_Link software to provide intelligent power management

Built-in two 5-dB antennas with industrial Intel WiFi
Stronger signal strength ensures constant internet

Design of DIN Rail for accessory integration
DIN Rail design allows the integration with accessories, and preventing damage to the structure.

Electrical Height Adjustment
Ergonomic height adjustment with an electric motor, resulting in smooth, easy operation.

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ADVANTECH iHealthcare
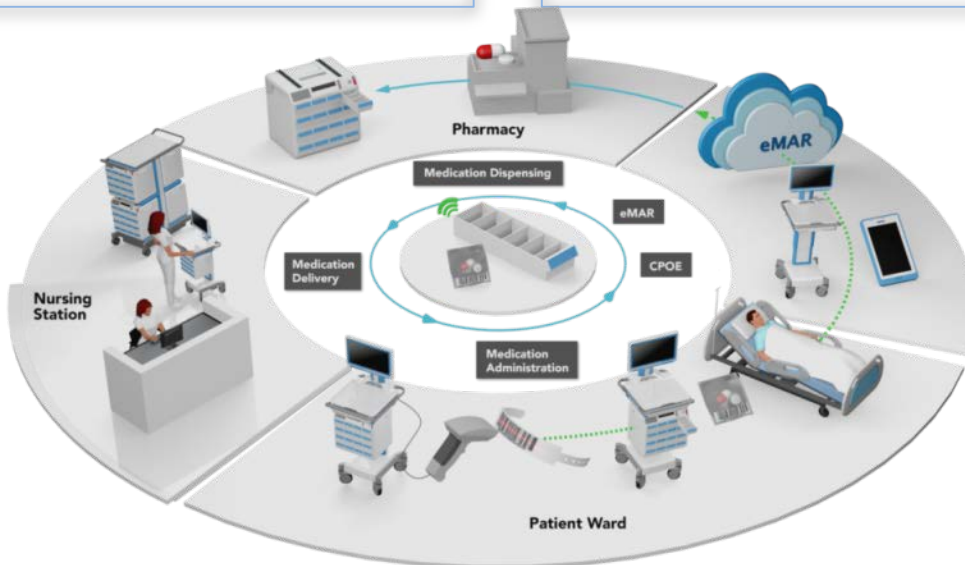
CLMA Products Offerings

AMiS

eMedication Box

Hot Swappable 100W x 2 iPS

- **Easy Swapping** as HDD
- Fit for all kinds of non-power carts
- Compatible for **AIO DC-in models**
- Hot Swappable with Maximum Power Capacity **200Wh** – 2 Power Modules plugged
- **Fanless Design** for infection control
- Front side **2 USB ports** for peripheral devices charging
- Client and Server base **Battery Management System** for IT monitoring

ADVANTECH iHealthcare

Applications in Nursing Care
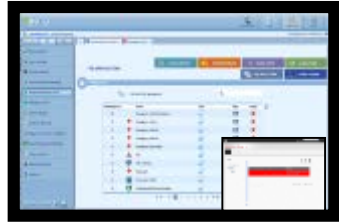
Electronic Nursing Dashboard

Smart Battery Kit & Remote management (with IoT Gateway & Utility Software)

IP Nurse Call Station

Mobile Workstation (Nursing Cart)

eMedication Box (for CLMA)

Smart Vital Sign Measurement

Medical Tablets (CIS/NIS/PACS Client)

Advantech iHealthcare

Domain Specific Cloud

iHealthcare

| Integrated OR | ICU/ER | Nurse Station | Patient Ward | Mobile & Ambulatory | Hospital Reception |

Application Ready Platforms

RESTful API

- AMiS_Link
- Medi_Link
- POC_Link
- HIT_Link

Cognitive Solutions

Healthcare Protocol: HIPPA/HL7/eMAR/CLMA/DICOM/HTM08-03

| Surgical Image | Endoscopic Image | NIS | Vital Sign Collection | Tele-medicine | Medication Admin | Nurse Call | iWard |

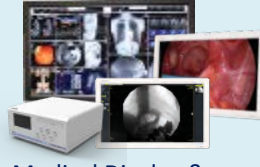ADVANTECH KOSTEC SigmaXG by Technusion mobitrace BeWell innovations swyMed TELEMEDICINE amis CLINICALL Klinik Infotainment Systems

Medical Computing Systems

| Medical AIO Computers | Medical Display & iOR Box | Healthcare Information Terminals | Medical Tablet & AIM | Medical Carts & Telemedicine |

Medical IoT Devices

WiFi Bluetooth SMART ZigBee dust networks Sub-1GHz LoRa SIGFOX NB-IoT

From Hospital to Healthcare Systems

Dialysis Department

Medical School

Main Hospital

Aged Facility

Clinic

Pharmacy

Radiology Department

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ADVANTECH iHealthcare

Digital Healthcare
Engaged with Smarter Hospitals

Point-of-Care

Integrated Operating Rooms

Telehealth

Intelligent Wards

Closed Loop Medication Administration

Outpatient Services

Medical Computers and Medical Displays

Medical Tablets

Healthcare Information Systems

Medical Carts and Telemedicine Solutions

Hospital Self-Service Systems

Capture Cards

Vital Sign Devices

Medical Tablets Accessories

Handset and Card Readers

Smart Battery Kit

Telemedicine Set

Barcode Readers

eMedication Box

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ADVANTECH iHealthcare