
# Avalue 42-inch Digital Paper Solutions

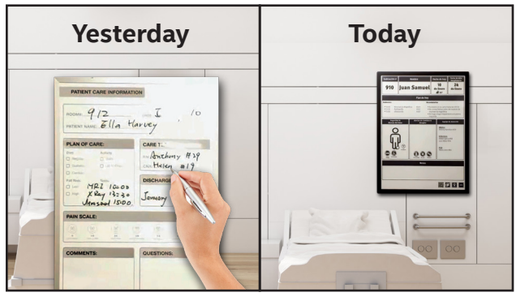
- Digitize your content with paper-like technology
- Slim, light weight & low power, easy to install & operate
- E Ink SDK/ API/ Sample Code/ Documents help for quick integration

**Easy on the Eyes** | **Paper-Like** | **Always On** | **Sunlight Readable** | **Lightweight** | **Low Power Consumption** | **Wide View Angle**

# Benefit of Digital Paper

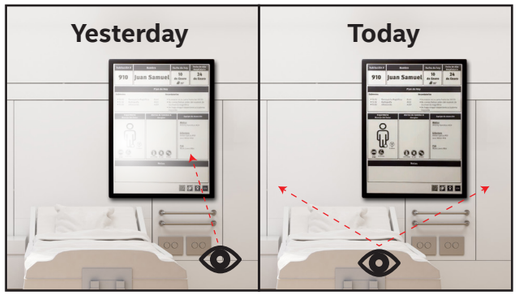
## Paper-like Display Revolution of the New Technology

Digital paper can help hospitals to digitize information where it is needed in the patient's room. Digital Paper can displays always-on information even during a power loss it can maintain it's last state of information. It features no light pollution which will not disturb the patient. The product is very low power and only consumes minimal power when you update the information on the display.

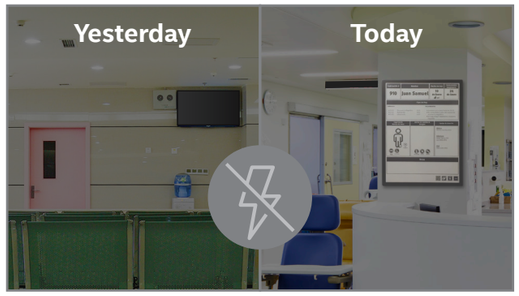



Digitize Traditional Content & Auto Update

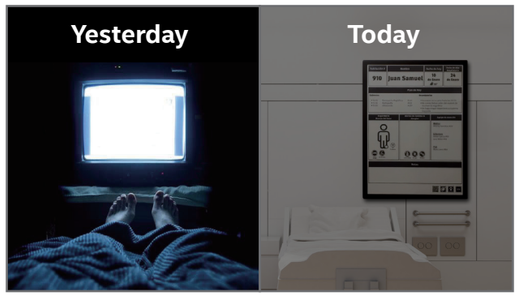

The Board allows for a dust free update and can easily be sterilized




Non-glare background, high contrast and easy to read from all angles




Information always-on and easy to read, even during power outages




Digital Paper does not emit any light and the Board will not disturb patient's rest or sleep


Easy installation - The Board is lightweight, as easy as hanging a picture on the wall


# Digital Paper Solutions

Digital Paper is a light-weight, flexible, and paper-like digital display. It is also a reflective display with bi-stable characteristics and consumes very low power. Digital Paper is the perfect display for all smart devices. Compared with LCD screens, Digital Paper is easier for our eyes because there is no emitting light to disturb patients' sleep or rest, making it an ideal digital display for hospitals and care facilities.

Avalue's Digital Paper solution offers a variety of sizes, from 5.65-inch to 42-inch, which can be applied to various application fields, such as Communication Board, Digital Signage, Bulletin Board, Digital Interactive Whiteboard (IWB), Information board, E-note, Door Room Sign, Bedside Card, etc. In addition, Avalue also opens hardware customization services and provides suitable software services with SI partners to meet each customer's needs. Please welcome to contact us for more information.

### Bulletin Board

- 42"/31.2" Black and White panel, 16 level grey scale
- True flat front panel
- Dual mPCIe expansion slot
- Optional open frame/ PCAP touch/front light module
- LAN/Wi-Fi/LTE support

### Digital Signage

- 25.3" Black/White/Red/ Yellow 4-color panel
- Front cover glass, support IP54
- Super slim bezel design
- Support linux kernel 5.16
- E Ink SDK/API support

### eNote Tablet

- 13.3" Black and White panel,16 level grey scale
- Extremely thin and light
- High-Contrast Display
- Up to three weeks use on a single charge
- Convenient tool for writing, highlighting, erasing

### Bedside Card

- 5.65"/13.3" Black/White/ Red tri-color panel
- Programmable buttons for notification
- LED light indicators
- Easy to install with wall mount kit
- Backend management software & API

### E-table Sign

- 7.3" Black/White/Red/ Yellow 4-color panel
- Dual side display with one exquisite pen slot
- No power needed during displaying
- BLE 5.0 & NFC communications
- Android APP support

## Avalue Solution Partner

imedtac 慧誠智醫
*Transforming Healthcare Through AIoT*

# Provide real-time care reminder reducing work loading and better care quality

- Integrate patient information from hospital information system andpresent it on the iMWard Bedside Patient Card automatically.
- Provide real-time medical care reminder, improve the care quality and interaction between care givers and patient.
- Reduce the loading and manpower on tedious paperwork, a good first step to achieve the paperless hospital.


## Why to choose imedtac

**We are Taiwan's Healthcare AIot expert, who can help you nabling your medical AIoT business.**

**1000+** bedside cards

**10+** institution

## iMWard Patient Management Platform

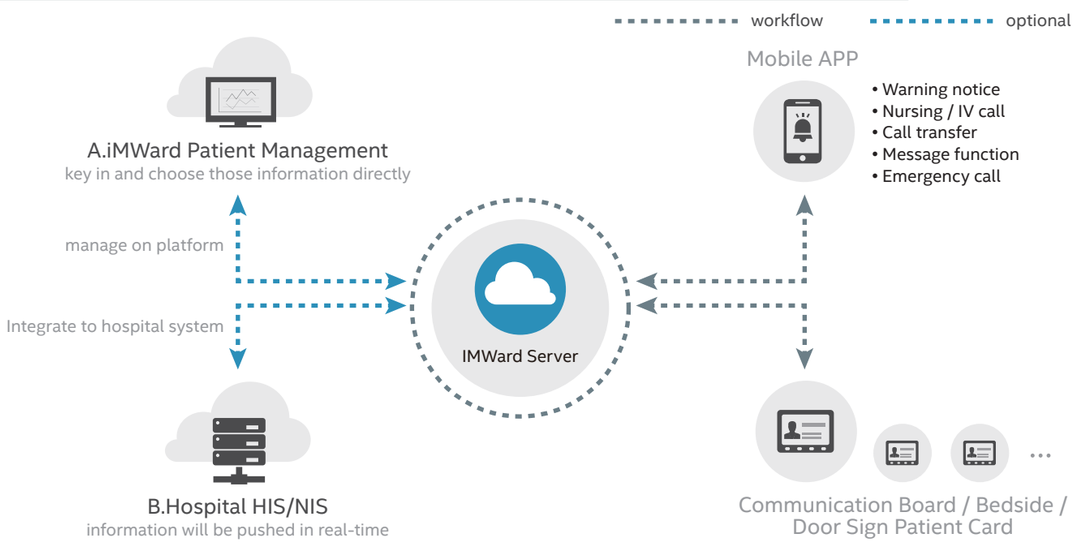
The most convenient way - manage your epaper in one time

**01 Patient management**
Personalized information like treatment process

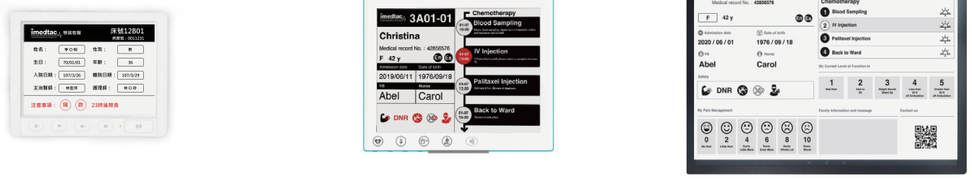
**02 Hospitalization management**
Notification query, announcement, account authority

**03 Device monitoring**
Batter, connection status, and connection time.

## iMWard Bedside Patient Card System Architecture




## Various sizes and variations - From 9.7" to 42"




| 9.7" | 13.3" | 42" |
|---|---|---|
| Black/ White/ Red | Black/ White/ Red | Black/ White |
| 4 physical buttons | 4 physical buttons | Capacitive touch |
| built-in 3100mAH | built-in 3100mAH | Output: 60W (12V/ 5A) |
| WiFi/ BT/ NFC | WiFi/ BT/ NFC | Lan |
| 25 x 20 x 1.8 cm | 31.5 x 26 x 2.1 cm | 92 x 70 x 4.5 cm |
| LED indicator | 1. HIPAA compliant<br>2. LED indicator<br>3. Battery swappable | Support pain management |

Avalue Solution Partner

GIPS 吉普司科技
GIPS Technology Co., Ltd.

# Nursing Dashboard System

GIPS Technology was established in August 2002. In the past, it has been committed to the development of intelligent geographic information systems (GPS).

In recent years, it has introduced project development experience into enterprise-level solutions and focused on research and development (R&D). The solution of the smart medical system, it is hoped that years of experience in software development and user operation procedures can be introduced into the smart medical system to provide solutions that are more suitable for solving user problems.

## Why Choose GIPS

- **Many years of experience in E-system integration**
- **Diversified application function integration**
- **The interface can be adjusted flexibly**

## Software Features

**Operation Interface / Function Modualarization**
The function modularized through operation interface for users or SI can s adjust display screen more flexibly.

**Software and hardware integration**
Can be directly integrated with UWB positioning or open interactive hardware, such as UWB services, direct positioning map into the electronic whiteboard system.

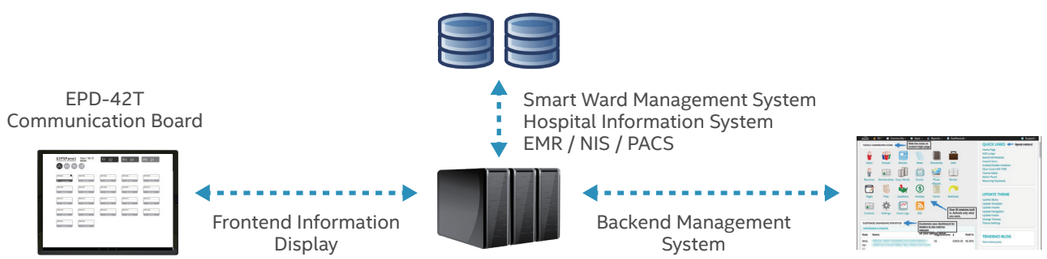
**Platform-based architecture development**
The platform is open to third-party software support and supporting independent download and installation.

**Multi-device browsing management**
The system provides import management for devices of different sizes and purposes. For example, the functions and interfaces of large-scale display devices and handheld devices will be different.

**Independent dashboard presentation**
The user interface is designed for hospitals' environment. The user can adjust background and color though dashboard setting tool.

**System Maintenance and update feature version**
System function updates and additions to maintain the optimization of the electronic whiteboard platform system functions and meet customer needs.

## Software Architecture




## Help Users Solve Problems

### 01 Replace the traditional recording method

Solve the problem that the current medical staff use the traditional whiteboard or note-taking recording method, integrate the medical staff's operating habits into the electronic whiteboard, and present information on the electronic whiteboard through an independent system.

### 02 Solve the problem of information out of sync

It can solve the problem of out-of-synchronization of data or the wrong source in the general traditional recording method, and can input information through the background management.

### 03 Action input data, not limited to regional venues

Medical staff can install an independent APP to the mobile device they usually carry, and they can log in to the system at any time on the hospital network, and update and record data.

### 04 Platform compatible and integrated with different software services

It can be connected and integrated with other external systems, and the required information is displayed in the electronic whiteboard, so that users can understand the required information through a system.

### 05 Independent account permissions

Each operator has his own account, which is convenient for data management and source sorting.

## Software UI


System Landing Page


Shift Schedule


Calendar


Change Shifts Remarks

## Avalue Solution Partner

GIPS 吉普司科技
GIPS Technology Co., Ltd.

GIPS Technology was established in 2002, which is committed to providing the best solutions for spatial information management.

### Spatial Information Surveying and Mapping

- Indoor map surveying
- UAV aerial photography
- 3D scanning and modeling

### Geographic Information System (GIS)

- Utility management system
- Spatial asset management
- Equipment inspection management

### Real-time locating System (RTLS) UWB + BLE + GPS

- Precision tracking solutions GIPSense UWB + BLE hybrid
- Vehicle GPS tracking


## Indoor locating Tag with ePaper Applications

### Bed Identification Information Tag

- Bed location information
- Precautions for the equipment of the hospital (Information on malfunction or pending repair)
- Patient personal information
- The bed equipment tracking information

### Patient Identification Information Tag

- Regular outing identification
- Status display information board for the patient precautions
- Patient 's personal information identification card

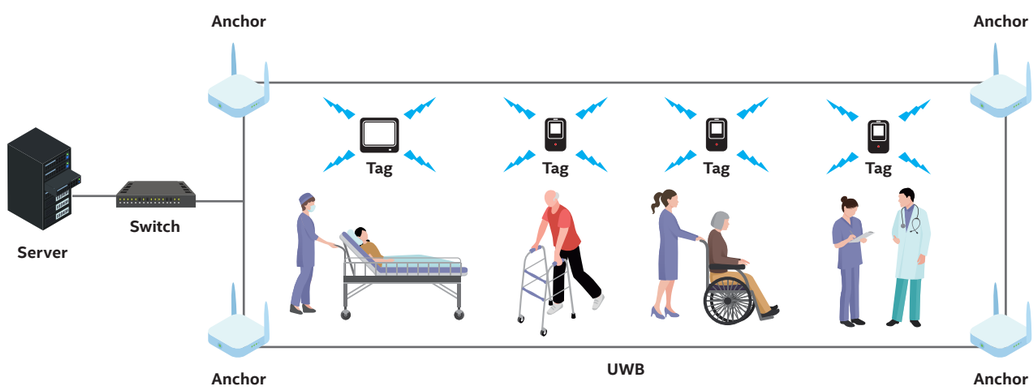
### Patient Identification Information Tag

- Emergency prompt information display
- Movement and location safety alarm
- View patient's information through QR code

### Doctor Identification Information Tag

- Doctor information display
- Emergency attention information display
- Doctor real-time positioning

## System Architecture




## Product Specification

for person/asset

for asset

| UWB Tag with ePaper Display | | |
|---|---|---|
| **Model Number** | **GT-120** | **GT-420** |
| **Mechanical & Environmental** | | |
| **Standard** | IEEE802.15.4a/ IEEE 802.15.1 | IEEE 802.15.4z/ IEEE 802.15.1 |
| **Size (mm)** | 57×87.5×7 | 109×98×24 |
| **Weight (g)** | 38 | 165 |
| **Power Requirement** | +5V DC-in | - |
| **Power Dissipation** | < 1W (Instant) | < 1W (Instant) |
| **Battery Life** | > one month@1Hz/TDoA mode | > 2 years@1Hz/ TDoA mode |
| **Blink Rate** | 0.1 ~ 20Hz (Adjustable) | 0.1 ~ 20Hz (Adjustable) |
| **LED** | Red Flicker: Low power status<br>Green Flicker: Flash while uwb is working<br>Blue Flicker: Charging status | Red Flicker: Low power status<br>Green Flicker: Normal power status |
| **Temperature** | Operating: 0°C ~ 50°C<br>Storage: 0°C ~ 40°C | Operating: -20°C ~ 65°C<br>Storage: -25°C ~ 60°C |
| **Humidity** | Operating: 35% ~ 70%<br>Storage: 35% ~ 70% | Operating: 0% ~ 90%<br>without condensation |
| **IP Rating** | IP 65 | IP 65 |
| **Others** | SOS Alert, Vibration, Buzzer | - |
| **UWB** | | |
| **Frequency** | 3.24GHz~6.74GHz<br>(Channel 1/ 2/ 5) | 6.24GHz ~ 8.24GHz<br>(Channel 5/ 9) |
| **Physical Rate** | 110 Kbps/ 850 Kbps/ 6.8 Mbps | 850 Kbps/ 6.8 Mbps |
| **Channel Frequency Width** | 500 MHz | 500 MHz |
| **Working Mode** | ToF/ TDoA | ToF/ TDoA |
| **E Ink** | | |
| **Size** | 1.54" | 4.2" |
| **Colour** | Black and white | Black and white (4 gray scales) |
| **BLE** | | |
| **Frequency** | 2.4GHz ~ 2.4835GHz | 2.4GHz ~ 2.4835GHz |
| **Physical Rate** | 2Mbps | 2 Mbps |

| UWB Anchor | |
|---|---|
| **Model Number** | **GA-210** |
| **Mechanical & Environmental** | |
| **Standard** | IEEE802.15.4a<br>IEEE802.11 b/g/n<br>IEEE802.3at<br>IEEE 802.15.1 |
| **Interface** | DC power interface (Ø 2.0mm)<br>RJ45 10/100Mbps<br>Software Reset |
| **Size (mm)** | 128 x 134 x 37 |
| **Weight (g)** | 250 |
| **Power Requirement** | +5V DC-in/ Powered LAN (802.3af) |
| **Power Dissipation** | < 10W (avg.) |
| **LED** | PWR: Green, Bright after power on<br>UWB: Green, Flicker during positioning interaction<br>LAN: Green, Flicker in wired data transmission<br>Wi-FI: Green, Flicker in Wi-Fi data transmission<br>BLE: Blue, Bright after power on |
| **Temperature** | Operating: -20°C ~ 65°C<br>Storage: -40°C ~ 85°C |
| **Humidity** | Operating: 0% ~ 90% without condensation<br>Storage: 0% ~ 90% without condensation |
| **UWB** | |
| **Frequency** | 3.25GHz ~ 6.75GHz (Channel 1/ 2/ 3/ 5) |
| **Physical Rate** | 110 Kbps/ 850 Kbps/ 6.8 Mbps |
| **Channel Frequency Width** | 500 MHz |
| **Working Mode** | ToF/ TDoA |
| **Time SYNC** | Wireless SYNC |
| **Wi-Fi** | |
| **Frequency** | 2.4GHz ~ 2.4835GHz |
| **Channel Frequency Width** | 20MHz/ 40MHz |

## Avalue Solution Partner

Avision-Labs, Inc.


# Digitize Your Paper Document - Scan, Copy, Print Just One Click

Founded in April 1991 by a group of engineers with strong engineering expertise, Avision designs, manufactures, and markets a complete range of quality, high performance scanners and key components for multi-function products. Through innovative product development, strategic partnerships and successful business models, Avision has become a leading supplier in the scanner industry.

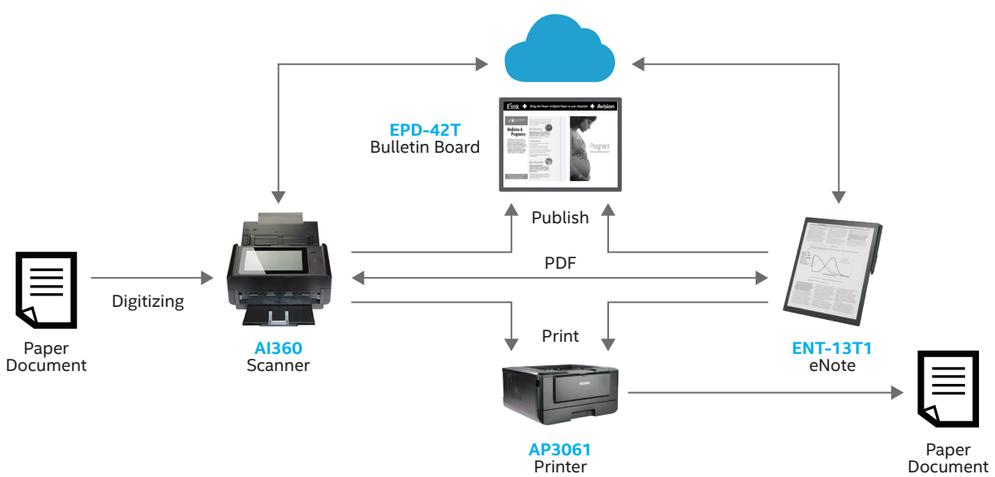
To ensure the world class product quality and reliability, Avision attained ISO-9001 certification in 1993 and ISO-14001 certification in early 2002. The implementation of ISO-9001 significantly helps every employee build quality into every aspect of the company's operation.

## Solution Features

Avision and Avalue are pleased to introduce a fully intergraded hybrid documenting solution for the healthcare applications. The solution allows for a more complete integration of both paper and digital paper solutions. We utilize the eNote for patient and healthcare workers to fill out medical forms, rounding notes and records electronically. Previous paper records can easily be digitalized by using the AI350 high speed scanner. The solution also provides editing, signing, timestamping, higher levels of security and other advanced features. The document can be published to EPD-42T bulletin board for public notification or printed using the AP3061 specialized printer, which can support up to 22" paper to accommodate wide range of different forms. We realize every customer is unique and therefore we also provide EHR integration and customization services.

Read · Edit · Sign · Timestamp · Portect · Print · Publish

## System Architecture




## Solution Specification

| EPD-42T | ENT-13T1 | AI360 | AP3061 |
|---|---|---|---|
| Bulletin Board | 13.3" eNote Tablet | Scanner | Printer |
|  |  |  |  |
| • 42" E Ink monochrome ePaper<br>• Display built-in touch screen<br>• High performance i.MX 7 dual processor<br>• Ultra-low power consumption<br>• Ultra-wide viewing angle<br>• No power needed to maintain display image<br>• Front IP65, Rear IPX1<br>• Sunlight readable and doesn't require a backligh | • 13.3" E Ink display<br>• High-contrast, High-resolution glare-free screen for easy reading<br>• Ultra low power<br>• Extremely thin and light<br>• Stylus for responsive data entry/ writing | • Easy-to-operate 8" LCD touch screen<br>• Hold 100 sheets in Automatic Document Feeder (ADF)<br>• Fast scans up to 60 ppm/ 100 ipm (A4 size, color, 300dpi)<br>• Build in ultrasonic sensor to detect paper jam<br>• A duplex scanner suitable for document and cards<br>• Energy star certificated | • Conventient mobile printing<br>• Fast, High-quality printing<br>• ID card copy (Optional)<br>• Built-in duplex print unit<br>• Remote device management via the embedded web page |

**Avalue Solution Partner**

DSignage Digital Signage Services, LLC

# Hospital Signage and Patient Room Display

DSignage is a client-centric system integrator that leverages many different software and hardware combinations to help client achieve their goals quickly. Skip the learning curve and go LIVE without hassle with content development and managed services. Making your life easier!

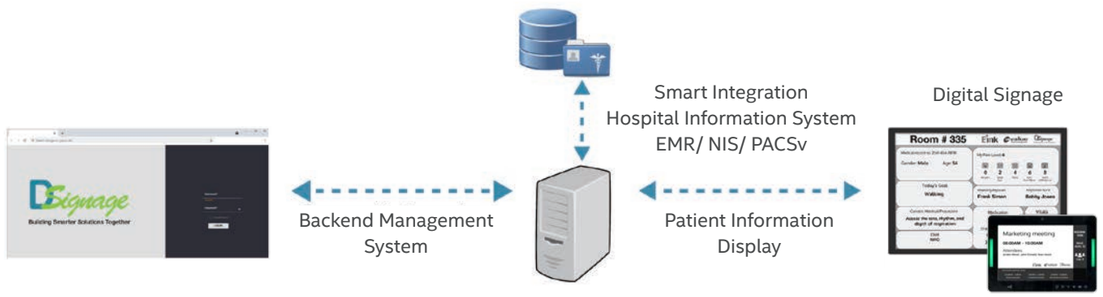

## Solution Features

Digital signage system integration and managed service provider.
Flexability to use and create positive experiences in healthcare through mobile applications, large format video walls, interactive information stations, employee communications, eink patient room displays/nursing boards and more.

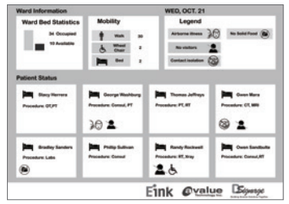
One-Stop-Shop for your digital transformations needs with digital signage as a service. Complete flexability toi leverage different content management systems and hardware specs to create the optimal communication environment without limits!

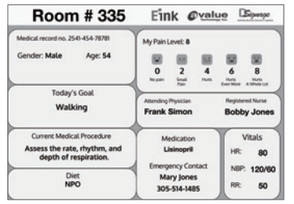
## System Architecture

Define pain points, collaborate with IT to know infrastructure requirements, design the digital solution, approve, test, implement, monitor, survey, and support when needed.
Solutions are designed to your needs, tailored to your enviroments and created following marketing guidelines to fit the look and feel prior to rollout.




## Hospital Signage Application


Nursing Station Dashboard



Ward Communication Board

Hospital Signage

Hospital Directory

Meeting Room Display

Menu Signage

## Solution Specification

**EPD-42T**
42" Digital Paper

**VNS-15W01**
15.6" Panel PC

**VNS-10W01**
10.1" Panel PC

## Avalue Solution Partner

TMM Software

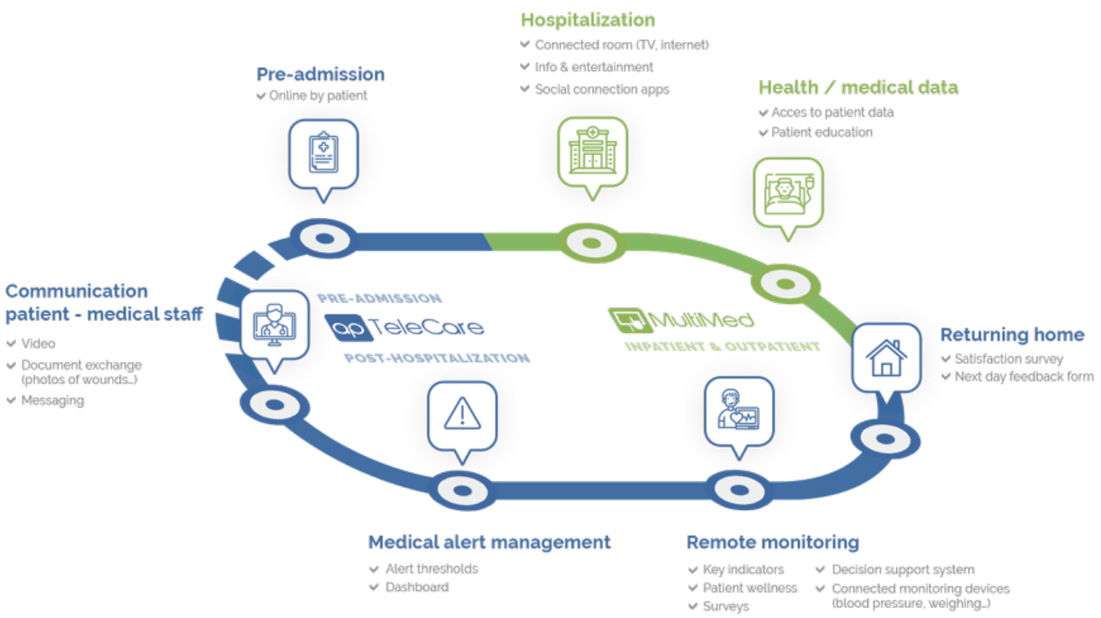
# Innovative in-room and outpatient multimedia platform

A healthcare player for more than 12 years, we design digital solutions that help to secure the patient care pathway.
We cover the entire patient care pathway through several patient-centric solutions at the service of healthcare professionals.
Our expertise in the eHealth sector has enabled it to deliver high-performance, innovative software used in more than 350 healthcare centres in more than 15 countries


## Solution Features

3 main solutions to cover all the patient pathway :
- Multimed : an Android based multimedia entertainment and medical information solution that can be used by healthcare centers for both inpatient and outpatient care.
- apTeleCare : medical telemonitoring solution for patient care and monitoring from pre-admission to post-operative

## System Architecture




## Solution Specification

MultiMed revolutionises the daily life of patients and the care team efficiency.
MultiMed delivers a complete Android multimedia solution to healthcare centers. From a digital device, the app enhances the patient's comfort and communication with the center. MultiMed delivers a flexible and open-ended solution to healthcare faclilities. Patient can access to informations, entertainement and can use new and innovative added services due to third pary services connections : meal ordering, automation, room service, nurse call, etc....
Multimed is also a way to improve caregivers work by giving them access to new features on the terminal : acces to EMR, xRay and any other medical application directly on the touchscreen.

apTeleCare is the secure medical remote monitoring solution that meets the needs of healthcare establishments to take care of their patients with various pathologies, directly at their homes. It ensures a continuous exchange between the patient and the healthcare professionals. In addition, apTeleCare In addition, enables its customers to easily and quickly create solutions to monitor remotly any kind of patients whatever his pathology, and maintaining the remote link with chronic patients at risk. The apTeleCare telemonitoring solution has naturally adapted to health constraints: it offers a new organization for monitoring patients at their homes and thus relieves the very strained caregivers.

### VNS-15W01
15.6" Panel PC

- 15.6", 1920 x 1080
- Projective Capacitive Touch
- Intel® Atom™ x5-Z8350 1.92GHz
- Up to 4GB RAM, 64GB eMMC
- DC +12 ~ 24V
- 410 x 269 x 38 mm
- Windows, Android, Linux

### HID-2138
21.5" Medical Panel PC

- 21.5" FHD Display with PCAP Multi-Touch
- Intel® 11th gen Tiger Lake U Core Processor
- Front Panel IP65
- Fanless Design
- Ultra-Slim Design
- Optional NFC/ Webcam/ Handset




Front View

Rear View

| Model Number | EPD-42T |
|---|---|
| LCD Size | 42” |
| Resolution | H: 2160 x V: 2880 |
| Viewing Angle | 180 (U), 180 (D), 180 (L), 180 (R) |
| Touch Type | Projective Capacitive |
| Processor | NXP i.MX 7Dual Processor / Dual Arm® Cortex®-A7 Cores And Cortex-M4 |
| System Memory | On-Board 2GB DDR3L |
| Wireless | Optional Wi-Fi + Bluetooth Module |
| Storage | On-Board 8GB eMMC |
| External I/O Connector | 2x USB 2.0<br>1x Micro USB OTG<br>1x Gigabit Ethernet |
| Power Requirement | DC +12V<br>Optional POE Power Adapter<br>Optional Expansion Power Bank |
| Operating Temperature | 0°C ~ 40°C (32°F ~ 104°F) |
| Storage Temperature | -20 ~ 60°C (-4 ~ 140°F) |
| Operating Humidity | 40°C @ 95% Relative Humidity, Noncondensing |
| Software Support | Android 5.1 (default) / Linux 4.15 (Yocto 2.1) |
| Dimension | 918.8 x 704.6 x 37.6 mm |
| Certification | CE, FCC Class B |

avalue Technology Inc

**Headquarters**
**Avalue Technology**
7F, 228, Lian-cheng Road, Zhonghe Dist.,
New Taipei City 235, Taiwan
Tel: +886-2-8226-2345
Fax: +886-2-8226-2777
E-mail: sales@avalue.com.tw
Web: www.avalue.com.tw

**Avalue USA**
**Avalue Technology**
9 Timber Lane, Marlboro, NJ 07746
Tel: +1-732-414-6500
Fax: +1-732-414-6501
E-mail: sales@avalue-usa.com

Solution Guide

Solution Video



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