

# FUTUREPROOF YOUR HEALTHCARE MANAGEMENT



Passed Medical  
certification



Ingress  
Protection



Anti-microbial  
housing

## Healthcare

Intelligent nurse station | AI and Robots | Telecare & Telemedicine |  
Emergency medical service

# About Winmate

Founded in 1996, Winmate Inc. is a pioneer in rugged computing technology. Winmate has provided business leaders worldwide with reliable, robust solutions for the most challenging industrial conditions for over two decades. From R&D to manufacturing to in-house testing, Winmate Inc. manages the entire product development process with ready-made products available for quick deployment. Today Winmate's innovative approach has helped countless enterprises at every level with equipment automation and seamless Industrial Internet of Things (IIoT) integration.

From the industrial display, panel PC, HMI, embedded systems to rugged mobile devices, Winmate caters to industries ranging from transportation and logistics to marine and military, railway, oil, and gas, and provides customization services to create a unique solution for specific customer requirements.

## The Winmate Difference

### Innovation and Ruggedness

With innovation and ruggedness, our products are designed to meet the requirements of vertical markets' environmental standards.

### Engineering Intelligence

We are committed to maintaining the highest standards in engineering excellence to ensure our products deliver reliability, durability, and optimized performance.

### Quality Commitment

Quality assurance and entire engineering processes are conducted in-house. It is why we invested significantly in our state-of-the-art testing facility with additional global support.

“ **INNOVATIVE  
TECHNOLOGY FOR  
OPERATIONAL  
EXCELLENCE.** ”

### Efficiency

Our team is committed to efficiency and maintaining the shortest possible development cycles. The whole development process is conducted in-house to achieve the market advantage in speed and quality from design to testing.

### Reliability

Reliability, service, and support are part of our foundation. Every product scrutinizes industrial standards testing to verify electrical, mechanical, thermal, and firmware design performance.

# Customized Solutions

Years of experience allow Winmate to offer customized solutions for different applications.

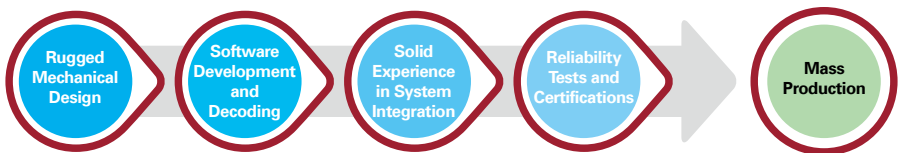
From product design to accessories, our engineering team designs and support the system integration process.

- CUSTOMIZED CONFIGURATION
- CUSTOM OS IMAGE
- CUSTOM BIOS
- ENCLOSURE DESIGN
- PERIPHERALS AND OPTIONS
- CUSTOM-DESIGNED ACCESSORIES

# Technical Know-How

We understand that access to cutting-edge solutions purposely built for their applications is imperative for enterprises operating in rugged or potentially hazardous environments. As a result, Winmate locates its resources from project research and design, software development and customization, product verification and validation, and in-house testing to research and implement the latest technologies available.

## The latest technologies we deploy for our rugged products:



- Dry and wet optical bonding
- Panel enhancement for sunlight readability
- Anti-reflection (AR) and anti-glare (AG) glass protection coating
- Light sensor
- Hyper dimming
- Electronic potting
- Touch screen integration: projected capacitive, resistive, or SAW touch
- Waterproof enclosure
- Military EMI and mesh coating
- Wireless capabilities
- Data capture devices integration
- Defroster for ultra-low temperature environments
- Stainless steel SUS 316/ AISI 316
- Shock and vibration resistance
- Wide-range operation temperature

# Healthcare Solutions

## Overview

Technology has long played an imperative role in streamlining hospital operations and improving patient care. In hospital environments, performance, reliable and accurate image reproduction are imperative. From medical images to patient data, the hospital environment is a complex ecosystem that requires advanced technology to keep it running smoothly.

### Our medical imaging solutions include :

- Surgical and clinical display
- Durable design and know-how in medical images visualization

Expand your medical and healthcare business with the Winmate. As a technology solutions leader, Winmate values our partners. As a partner, you are a vital instrument in ensuring the customer needs are understood and that their expectations are exceeded every time.

## Technology

### Certification & Quality Approvals

Winmate developed and implemented a quality management system based on a process management approach that has demonstrated its ability to provide consistent products that meet customer and applicable regulatory requirements.

The quality system complies with the international standard ISO 9001:2008 and the standards which apply to related industries.

Winmate achieved ISO 13485:2016 and EN ISO 13485:2016 certification for its' design, development, production, installation, and servicing of medical devices. This achievement also enables Winmate to expand its medical-related product line, and create new opportunities for our original design manufacturer (ODM), original equipment manufacturer (OEM), and rebranding partners.

ISO 9001

ISO 14001

IECQ QC080000

ISO 13485



What does this mean for you? Winmate's certification confirms any portable panel PCs and mobile tablets we develop for use in the Healthcare industry are safe and meet all regulatory design requirements.



# YOUR HEALTHCARE APPLICATION. OUR RUGGED COMPUTING SOLUTION.

## Industrial Challenges

- **Real Time Information**

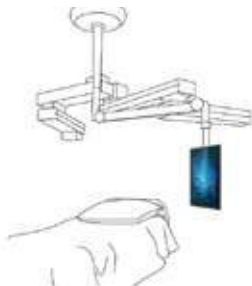
The trend in Healthcare applications is to get patients' information in real time for a quick response. Cost saving, online data available everywhere and reduced loading of personnel are the key benefits of this solution. Physicians, clinicians, nurses and ambulance workers who take care patients can focus on helping them, instead working with papers and reports.

- **Reliable and Accurate Image Reproduction**

In hospital environments, performance, reliable, and accurate image reproduction are imperative. From Healthcare images to patient data, the hospital environment is complex ecosystem that requires advance technology to keep it running smoothly. The Display with a UHD 4K (3840 x 2160) resolution and a 3D LUT for color accuracy; helps minimize errors and improve hospital operational efficiencies.

- **Complex Environment**

The need is to reduce cable cluttering and maintenance downtime.



Patient Monitoring Display



Point-of-Care



Patient Identification and Report

# Application Story

## Patient Care



## Background

Portable and mobile devices dive into hospital environments. The ability to gather and access information with the touch of a fingertip, and carry it around wherever you go is invaluable for those working in this sector. Portable and mobile computers allow paramedics and nurses to instantly access and keep patient records. They use the tablets to schedule patient checkups in both outpatient and inpatient wards, issue and authorize prescriptions, record and transmit patient data in multimedia format and use instant live video conferencing and chat features to enhance collaboration. With technological advancements healthcare professionals can to provide better patient care.

## Core products

- 10.1" Healthcare Tablet Computer M101P-ME

## Main Challenges

- Expansion adapter module design for USB connection
- Must be able to work with vehicle docking
- Customized housing with anti-bacterial material

## Why Winmate

- Integrated barcode scanner for data collection
- Medically certified vehicle docking
- Medically certified IEC/EN 60601-1, IEC 60601-1-2

“**MOBILE HEALTHCARE TECHNOLOGIES FOR BETTER PATIENT CARE.**”



Application Diagram: Patient Care

# Application Story

## Operating Room



## Background

Modern operating rooms equipped with technologies for minimally invasive surgery, robotic surgery and video equipment. Accurate and real-time imaging is critical to successful surgical operations. With the number of Healthcare display options available, knowing which will best suit your needs can be a challenge. The Winmate line of 4K UHD monitors, implement the latest in technology, are making the decision easy. Our surgical displays help to provide optimal patient care in the operating room environment.

## Core products

- 4K UHD Surgical Display 32"

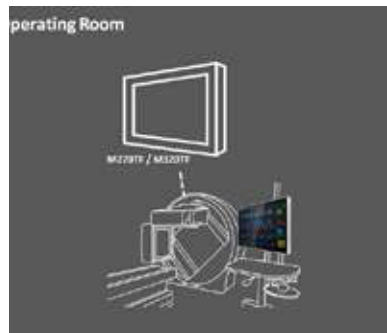
## Main Challenges

- True color depiction
- No picture delay acceptable

## Why Winmate

- Compliant with safety standards for clinical use
- 3D LUT profile selection + 6 general user color schemes
- Antimicrobial surface coating
- Wide range of inputs 3G SDI, HDMI 2.0, HDMI 1.4, VGA, DVI

“  
**4K UHD HEALTHCARE  
DISPLAY FOR HIGH  
ACCURACY REAL-  
TIME IMAGING  
DURING SURGERY**  
”



Application Diagram: Operating Room

# Application Story

## Digital Operation Room



### Background

Healthcare Rugged Tablet assists communication between the operating table and other divisions in the medical center and clinical units. The tablet, combined with a specialized software program, supports the e-Healthcare to monitor the surgery and facility management.

Winmate healthcare-grade tablet with a 10.1" screen to guarantee optimum visibility. Various Wireless connectivity options and compact form-factor for mobility. It is easy to use and facilitates faster data transfer from and to the surgery room for information management, consultation, or educational purposes.

### Core products

- 10.1" Healthcare Tablet Computer M101P-ME

“Futureproof Your Healthcare IoT.”

### Main Challenges

- Examination Camera HD
- IP54 water/dust rating
- Tough scratch-resistant Gorilla Glass touch-screen
- Sunlight readable, high-contrast 10.1" LCD
- Dual long-life hot-swappable rechargeable batteries

### Why Winmate

- Ruggedized, state-of-the-art tablet
- Medically certified vehicle docking



Application Diagram: Digital Health



# 10.1" Windows Healthcare Rugged Tablet M101P-ME



“ **DROP-RESISTANT.  
MOBILE. RUGGED.** ”

- 10.1", 1920 x 1200 PCAP touchscreen
- Intel® Pentium® N4200 1.10 GHz, up to 2.50 GHz
- Windows 10 IoT Enterprise

CE, FCC, UL, PTCRB, Verizon, IEC/EN 60601-1, IEC/  
EN 60601-1-2, UL 60601-1

Housing enhanced with antimicrobial properties

Long battery life

USB 3.0 (Type C) connector

Optional 1D/2D barcode scanner to scan medications  
or wristbands (Optional)

Lightweight, rugged, IP65 waterproof and dustproof

MIL-STD-810G shock, vibration and drop resistance

## Custom configuration



Memory



Storage



WWAN



High  
Capacity  
Battery



Barcode  
Reader



HF RFID  
Reader

## Application



## Patient Care

“IMPROVES EFFICIENCY  
AND SAVES TIME FOR  
REGULAR CHECKUPS”

With a 10.1-inch tablet  
computer M101P-ME, nurses  
can easily access patient  
information any time from  
any place. If needed, the  
M101P-ME can also retrofit  
medication schemes and  
doctor prescriptions.

# 10.1" Android Healthcare Rugged Tablet M101Q8-ME

## Custom configuration



Micro HDMI



Hotswap Battery



Barcode Reader



FCC CE

“

**DROP-RESISTANT.  
MOBILE. RUGGED.**

”

## Application



### Intelligent nurse station

“PROVIDE MEDICAL ORGANIZATIONS WITH EASIER ACCESS TO IN-HOUSE SCHEDULING AND PLANNING.”

Along with a competent registered nurse terminal, health professionals may react and also check to a variety of various information input aspects.

- 10.1", 1920 x 1200 TFT LCD Display
- Qualcomm® Snapdragon™ 660, Octa-core up to 2.2 GHz
- Android 9.0

CE, FCC, IC IEC 60601-1, IEC 60601-1-2, EN 60601-1

Housing enhanced with antimicrobial properties

3 GB RAM + 32 GB eMMC

Integrated RFID module

8 MP front camera, 13 MP rear camera with autofocus

Lightweight, rugged, IP65 waterproof and dustproof

MIL-STD-810G shock, vibration and drop resistance

# 15.6" Multi-Touch Color Surgical Display W15L100-PTA3-ME



“ **FOR MEDICAL IMAGING  
AND CLINICAL DATA  
VISUALISATION.** ”

- 15.6", 1920 x 1080 resolution
- Projected capacitive multi-touch
- Housing with antimicrobial properties

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Certified IEC 60601-1:2005, IEC 60601-1-6:2010,  
EN60601-1-2 (Ed. 4.0)

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VGA input and HDMI input

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Stylish and elegant design

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Support VESA mount

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## Custom configuration

N/A

## Application



## **Diagnosis and Clinical Review**

“SHARP & BRIGHT  
IMAGES”

Winmate 15.6" healthcare display allows monitoring patient information and supports various mounting options for added convenience of diagnosis and clinical review.

# 32" 4K UHD Healthcare Display M320TF

## Custom configuration



AR Glass



DICOM



High  
Brightness



Backlight  
Sensor



Calibration  
Software



“ **PIXEL-PERFECT IMAGES  
FOR CLINICIANS.** ”

- 32", 3840 x 2160 resolution
- Projected capacitive touch
- Chassis, VESA mount

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Certified IEC 60601, EN60950-1

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4K signal input HDMI/ DP/ SDI

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3D LUT color scheme

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Backlight sensor, ambient light sensor

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Housing with antimicrobial properties

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Support VESA mount

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## Application



## Diagnosis and Clinical Review

“OPTIMIZED DISPLAY SOLUTIONS TO IMPROVE VISUALIZATION FOR AID IN CRITICAL DIAGNOSIS”

The M320TF display with 4K UHD resolution offers a user-friendly interface designed to improve workflow for healthcare environments, facilitate patient care while meeting the regulations of the healthcare industry.

# 32" 4K UHD 12G-SDI Color Surgical Display

## M320TF-SDI



### “NEXT LEVEL OF HEALTHCARE IMAGING.”

- 32", 3840 x 2160 resolution
- Projected capacitive touch
- Chassis, VESA mount

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Certified IEC 60601, EN60950-1

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4K signal input HDMI/ DP/ 12G-SDI

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3D LUT color scheme

---

Backlight sensor, ambient light sensor

---

Housing with antimicrobial properties

---

Support VESA mount

---

### Custom configuration



AR Glass



DICOM



High  
Brightness



Backlight  
Sensor



Calibration  
Software

### Application



### **Surgical Display**

“4K SIGNAL TRANSMISSION TO A DISTANCE FOR UP TO 150 METERS”

The M320TF-SDI is a 32" surgical display with a 12G-SDI interface to ensure the precise imagery remains unchanged from the video source to the 4K display and allows healthcare providers to have the most accurate imaging.

# M101Q8-ME

RUGGED  
HEALTHCARE  
TABLET COMPUTER  
FOR BETTER  
PATIENT CARE



**WINMATE**



QuickCover  
technology



Lightweight



IP65  
Waterproof



Rugged