

# HEALTHCARE

**Intelligent Nurse Station/  
Telecare & Telemedicine/  
Emergency Medical Service/  
AI and Robots**

**SOLUTIONS TO DRIVE  
SUPPLY CHAIN INNOVATION**

**Q1 - 2023**

# 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.

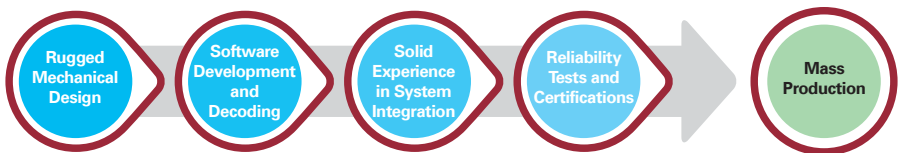
From product design to accessories, our engineering team designs and support the system integration process.

- 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.



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**

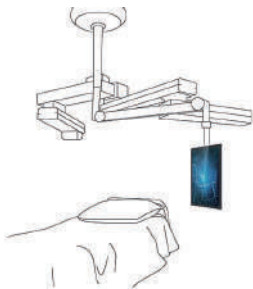
The trend in Healthcare applications is to get patients' information in real time for a quick response. Cost saving, online data available everywhere and reduced loading of personnel are the key benefits of this solution. Physicians, clinicians, nurses and ambulance workers who take care patients can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

- **Complex Environment**

The need is to reduce cable cluttering and maintenance downtime.



Patient Monitoring Display



Surgical Display



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

## 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
- IP65 water/ dust rating
- Tough scratch-resistant chemically strengthen 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

## Custom configuration



Memory



Storage



WWAN



High  
Capacity  
Battery



Barcode  
Reader



HF RFID  
Reader



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

”

## Application



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

## 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.

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



# 10.1" Android Healthcare Rugged Tablet M101Q8-ME



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

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

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

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Housing enhanced with antimicrobial properties

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3 GB RAM + 32 GB eMMC

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Integrated RFID module

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8 MP front camera, 13 MP rear camera with autofocus

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Lightweight, rugged, IP65 waterproof and dustproof

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

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## Custom configuration



Micro HDMI



Hotswap Battery



Barcode Reader

## 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.

# 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,  
EN 60601-1-2:2015

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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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## 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" Multi-Touch Color Surgical Display W32L100-PTA1



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

- 32", 3840 x 2160 resolution
- Projected capacitive multi-touch

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Certified IEC 60601-1:2005, IEC 60601-1-6:2010, EN 60601-1-2:2015

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Support VGA, DVI, HDMI, DP variety signal input

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Fanless and ventless design, easy-to-clean, multi-touch color surgical display

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Support IR remote controller

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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 W32L100 series display support VAG and HDMI offers a user-friendly interface designed to improve workflow for healthcare environments.

# 32" Multi-Touch Color Surgical Display W32L100-PTA3-ME



FCCE

“ NEXT LEVEL OF  
HEALTHCARE IMAGING. ”

- 32", 1920 x 1080 resolution
- VESA mount

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Compliance IEC 60601-1:2005, IEC 60601-1-6:2010,  
EN 60601-1-2:2015

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Support VGA, HDMI signal input

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Fanless and ventless design, easy-to-clean medical  
grade monitors

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Support VESA mount

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## Application



## Surgical Display

“32” SURGICAL DISPLAY  
SUPPORT VESA MOUNT  
AND EASY TO CLEAN”

The 32” surgical display ensure  
the precise imagery remains  
unchanged from the video  
source to the display and  
allows healthcare providers  
to have the most accurate  
imaging.

# 32" Multi-Touch Color Surgical Display W32L100-PTA1-SDI



## “ PROJECTED CAPACITIVE TOUCH WITH 4K UHD RESOLUTION. ”

- 32"; 4K UHD 3840 x 2160 resolution
- Projected capacitive touch
- VESA mount

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Compliance IEC 60601-1:2005, IEC 60601-1-6:2010,  
EN 60601-1-2:2015

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Support 12G-SDI, HDMI (Optional),  
DP variety signal input

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Fanless and ventless design, easy-to-clean medical  
grade monitors

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Support VESA mount

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### Application



### **TECHNOLOGIES TO IMPROVE PATIENT CARE**

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

4K UHD monitors, implement  
the latest in technology, are  
making the decision easy.

# M101Q8-ME

RUGGED  
HEALTHCARE  
TABLET COMPUTER  
FOR BETTER  
PATIENT CARE



**WINMATE**

