WINMATE
www.winmate.com

WAREHOUSE & LOGISTICS

SOLUTIONS TO
DRIVE SUPPLY CHAIN
INNOVATION

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.

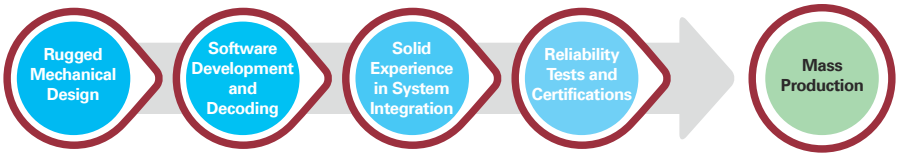
From product design to accessories, our engineering team designs and support the system integration process.

- 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

Logistics and Transportation

Overview

In the warehouse environment, the ability to mount mobile devices and computers to forklifts, trucks, tuggers, and inventory pickers is essential for maximizing productivity. From inventory management to order fulfillment, asset tracking, shipping, and receiving, the warehouse floor is a complex ecosystem requiring highly efficient technology to keep things running smoothly.

Our vehicle mount computers include:

- The latest Android™ or Windows® operating system
- Robust wireless communications
- Vehicle mounting solutions

Winmate's rugged vehicle-mounted computers and rugged tablets are designed to fit seamlessly into forklifts and other warehouse vehicles, which helps minimize errors, streamline ordering and inventory management, and improve operational efficiencies.

Industrial Challenges

- **In-vehicle installation**
  Computer hardware tailored for warehouse and logistics must be compatible with RAM mount or VESA mount in-vehicle installation methods.
- **Unstable power supply from the vehicle**
  Instability during start-up and shutdown can cause system crashes and restarting issues. Devices that receive power from the vehicle must have a solution to ensure stable performance in unstable power supply situations.
- **Working in cold storage areas**
  In a large warehouse environment, forklifts frequently go back and forth between the cold storage areas and room-temperature environments. The computer devices must show stable performance in low and high temperatures.
- **Driver's safety**
  The computer must not distract the driver.
- **Strong vibration**
  Devices installed on a forklift must be rugged enough to withstand all-day operations and vibration from the vehicle.

Technology

- RAM mount and VESA mount solutions
- Wide-range power input and ignition control
- Built-in defroster to work in cold storage
- Screen blanking function to automatically control screen behavior
- Waterproof, dust, and drop resistant IP65-rated enclosure
- Accessories tailored for warehouse and logistic applications

WE DELIVER RUGGED COMPUTING SOLUTIONS FOR YOUR LOGISTIC NEEDS.

TABLET FOR VEHICLE MOUNT COMPUTERS

A tablet for Vehicle Mount Computers is a rugged device designed to withstand harsh environments.
It securely attaches to a vehicle dashboard or windshield, serving as a mobile workstation. These tablets run applications like navigation, fleet management, and diagnostics, while connecting to peripherals. Winmate's rugged tablets integrate seamlessly into vehicle mount computers, empowering frontline workers in logistics, manufacturing, and public safety.

RUGGED TABLETS

Portable and wireless rugged tablet computers can survive in any environment and get real work done.

VEHICLE-MOUNTED COMPUTERS

Rugged vehicle-mounted computers are used for data collection in the warehouse and logistic applications, designed to fit seamlessly into forklifts, trucks, and other vehicles.

Application Story

Forklift Automation

Background

In our increasingly interconnected world, transportation and logistics play a crucial part in a globalized world that's keeping goods and workers on the move. Forklifts equipped with Winmate's vehicle-mounted computers can solve challenges in material handling. Modernized automated technology stands to reduce labor costs, minimize errors, streamline ordering and inventory management, and improve operational efficiencies.

Core Products

- Vehicle-mounted computers

Main Challenges

- Working in cold storage areas
- High level of vibration
- Mounting onto the forklift
- The device is subject to drops and breakage

> "TECHNOLOGIES TO SIMPLIFY WAREHOUSE MANAGEMENT AND SPEED UP WAREHOUSE OPERATIONS."

Why Winmate

- Reliable solution for cold environments
- Modular system that is easy to replace
- Vibration resistance
- RAM mount solution

Application Diagram: Forklift Automation

Application Story

Inventory Management

Background

Data collection, advanced communication, and connectivity are essential for efficient warehouse operations. Winmate's rugged tablets and mobile computers enable automation in the warehouse, which increases material handling, reduces costs associated with handling delays, and streamlines the supply chain. A built-in barcode scanner or RFID reader makes tracking incoming and outgoing shipments easier and enables warehouse inventory information to be monitored in real-time. Check a shipment's status and locate inventory records instantaneously. Advanced communication options enable uninterrupted communications and connectivity.

Core Products

- Rugged mobile computer
- Rugged tablet

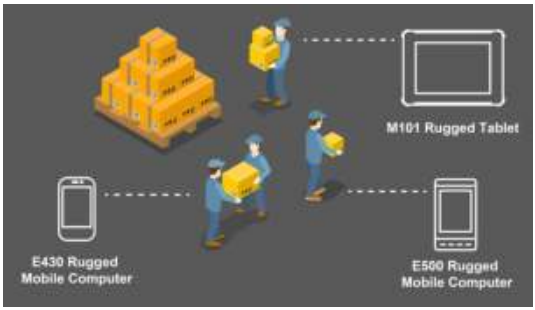
Main Challenges

- Scanning different types of barcode
- Working a full day

> **“STREAMLINE ORDERING AND INVENTORY MANAGEMENT, AND IMPROVE OPERATIONAL EFFICIENCIES.”**

Why Winmate

- Rugged construction
- Integrated barcode scanner
- High capacity battery and battery hot-swap
- Fast and efficient customization service



Application Diagram: Inventory Management

Application Story

AMR Lift Truck

Background

As technologies for sensing, mapping, and navigation have improved over the last decade, AGV (Automated Guided Vehicles) and Autonomous Mobile Robots (AMR, or Industrial Mobile Robots) are now available as an alternative to forklift trucks in warehousing, intralogistics industry, and factories. While AGVs often work in an environment separated from humans to maintain safety, AMR lift truck offers flexibility in navigating the workspaces through autonomy technology that combines data from cameras, LiDAR, and machine learning. The AMR's main components include an HMI controller, computing unit, battery, motors, sensors, and camera.

Core Products

- 7 to 14 inches Android / Windows vehicle-mounted computers
- 8 to 15 inches G-Win VM series Panel PC

> "AMR LIFT TRUCK IS CONSIDERED MORE FLEXIBLE."

Main Challenges

- Indoors to outdoors material flow
- Wide range of connectivity with stable computing capabilities

Why Winmate

- Reliable and versatile computing capabilities
- Each product has been tested based on the MIL-STD 810G/H against vibration, drop, and impact.

Application Diagram: Winmate rugged computers are designed durable and silent, adopting a fanless cooling system.

Application Story

Port Management

Background

The customer looked for tablets that can be carried around in hand and mounted in vehicles. Winmate offers a rugged tablet computer for the client to mounted in cars or carry on hand; it is user-friendly and easy to use. For better communication, our tablets offer 4G LTE WWAN, WLAN, GPS, and BT for port management solutions; also, they are certified by MIL-STD-810G and IP65 standards. Winmate solution brings you ruggedness and helps to increase productivity.

Core Products

- 10.4" Vehicle Mounted Computer, FM10
- 8" Rugged Tablet, M900P

Main Challenges

- Fast delivery
- Easy to carry

> "IMPROVE EFFICIENCIES WITH VEHICLE-MOUNTED COMPUTERS."

Why Winmate

- Local support in Singapore/ Malaysia
- Competitive price
- Follow up tight with the right channel
- Provide the POC unit on time to match customer urgent demand

Application Diagram: Low-power components of industrial computers prevent overheating and are less likely to achieve high temperatures in the first place.

Custom Configuration

Up to 16 GB
Memory

Bluetooth

WLAN
WLAN

Brightness

Protection Glass

Application

Energy Efficiency

EFFICIENCY REDEFINED: YOUR WAREHOUSE, YOUR WAY

Elevate Warehouse Operations with the 15" Windows Panel PC. Seamlessly integrated with Windows OS, it empowers real-time data management and precision control, optimizing energy usage and reducing costs. Experience smarter, eco-friendly warehousing with this cutting-edge technology.

10”~15” G-WIN Windows Panel PC

G-WIN GS Series

IP65

FC CE

“PRECISION MEETS PERFORMANCE”

- 10.1”~ 15”, with Projected Capacitive Multi-Touch (P-CAP)
- IE Series: Intel® Celeron® Elkhart Lake N6211 (up to 3.0 GHz) processor, Windows 10 IoT Enterprise, Linux Ubuntu 20.04 (Optional), Windows 11 IoT Enterprise, Windows 11 Pro 64 bit
- IB Series: Intel® Celeron® Bay Trail N2930 (up to 2.16 GHz) processor, Windows 10 IoT Enterprise, Linux Ubuntu 20.04 (Optional)

Fanless design
Optical bonding for sunlight viewability
VESA Mount/ Panel Mount solutions
Edge-to-edge design

7”~15” G-WIN Android Panel PC

G-WIN GS Series

“ **ACCURACY FUSED WITH EXCELLENE** ”

- 7”~ 15”, with Projected Capacitive Multi-Touch (P-CAP)
- IM Series: ARM A53 Quad Core 2.0GHz, Android 11 (Upgradable to Android 13), Linux OS (Optional)
- FA Series: NXP i.MX6 Dual Core, 1.0 GHz, Android 6.0 (Optional), Debian 7.0 (Optional), Linux OS (Optional)
- MG Series: ARM 2 x A78 2.0GHz + 4 x A55 2.0GHz

Fanless design
Full IP65 Panel PC
Ultra-low power consumption
1 x LAN, 1 x RS232, 1 x USB, 1 x USB Type-C, 1 x Micro SD

Custom Configuration

Up to 4 GB — Memory

Up to 32 GB — Storage

Brightness

Application

Optimal Energy Consumption

UNLOCK WAREHOUSE EXCELLENCE

Transform your warehouse operations with the 15" Android Panel PC. Seamlessly integrated with Android and Linux OS, it revolutionizes real-time data management and precise control, resulting in efficient energy utilization and cost reduction. Embrace a smarter, eco-conscious approach to warehousing with this state-of-the-art technology.

Custom Configuration

Up to 64 GB

Memory

Bluetooth

HDMI

Brightness

Protection Glass

Application

Quality Control

PRECISION IN EVERY SHIPMENT, QUALITY CONTROL AT ITS BEST

The 23.8" Windows Panel PC revolutionizes quality control in logistics and warehouses. With its expansive screen and powerful processing capabilities, it provides a comprehensive platform for real-time monitoring, data analysis, and quality assurance, ensuring that every product meets the highest standards before reaching its destination.

7" ~ 24" G-WIN Windows Panel PC

G-WIN GC Series

FC CE

"UNLEASHING WAREHOUSE POWER TODAY"

- 7"~ 24"with Projected Capacitive Multi-Touch (P-CAP)
- IB Series: Intel® Celeron® N2930 (up to 2.16 GHz), Windows 10 IoT Enterprise (Optional), Linux Ubuntu 20.04 (Optional)
- IE Series: Intel® Celeron® Elkhart Lake N6211 (up to 3.0 GHz), Windows 11 IoT Enterprise (Optional), Windows 10 IoT Enterprise (Optional), Linux Ubuntu 22.04 (Optional), Windows 11 Pro 64 bit (Optional)
- IP Series: Intel® Pentium® N4200 Apollo Lake (up to 2.5 GHz), Windows 10 IoT Enterprise (Optional), Linux Ubuntu 18.04 (Optional)

Front IP65 for protection against water and dust

A true flat, easy-to-clean front surface with edge-to-edge design

Fanless cooling system and ultra low power consumption

7" ~ 24" G-WIN Android Panel PC

G-WIN GC Series

FC CE

"UNLOCK WAREHOUSE POTENTIAL"

- 7"~ 24"with Projected Capacitive Multi-Touch (P-CAP)
- IM Series: ARM A53 Quad Core 2.0GHz CPU, Android 11.0, Linux Yocto 5.10.104 and Ubuntu (Optional)
- IQ Series: Qualcomm® Snapdragon™ 660 octa-core, 2.2 GHz CPU, Android 9.0
- MG Series: ARM 2 x A78 2.0GHz + 4 x A55 2.0GHz, Android 13

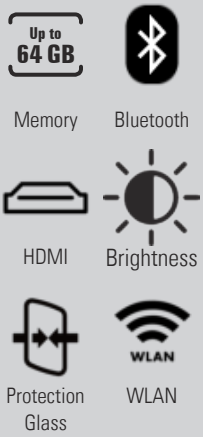
Front IP65 for protection against water and dust

A true flat, easy-to-clean front surface with edge-to-edge design

Support Android or Linux operating system

Plenty of I/O, including 1 x Micro USB, 2 x USB 2.0; 1 x RS232/422/485; 1 x RJ45; 1 x Micro SD Slot; 1 x Micro HDMI (Optional)

Custom Configuration



Application

Digital Documentation

DIGITAL POWERHOUSE AT YOUR FINGERTIPS

Revolutionize Warehouse Efficiency with the 15" Android Panel PC. Experience a paperless transformation with seamless digital documentation. Streamline record-keeping, enhance accuracy, and optimize workflows like never before.

Custom Configuration

Memory (W12IE3S-GSB1)

BT

WWAN

GPS/ GLONASS

WLAN

M12 Type

SIM Card Slot

Application

Inventory Management

NAVIGATING STOCK BEYOND PRECISION

The 12.3" Panel PC redefines inventory management with its user-friendly touch-screen interface, enabling warehouse managers to easily monitor, track, and update inventory in real-time. Powered by the robust Intel® Celeron® N6211 Elkhart Lake processor, it ensures accuracy and efficiency, all from a single accessible hub.

12" G-WIN GS Series Panel PC

W12IE3S-GSB1/ W12MG3S-GSB1

“ EXCELLENCE IN LOGISTICS SUCCESS ”

- 12.3” 1920 x 720 panel with projected capacitive multitouch screen
- Intel® Celeron® N6211 Elkhart Lake, Windows 10 IoT Enterprise, Linux OS (Optional) (W12IE3S-GSB1)
- ARM 2 x A78 2.0GHz + 4 x A55 2.0GHz Android 13 (W12MG3S-GSB1)
- M12 waterproof connectors
- IP65 waterproof and dustproof

Shock and vibration resistance according to MIL-STD-810H
Fanless design
Optical bonding for sunlight viewability
VESA mounting solutions

12” G-WIN GC Series Panel PC

W12IE3S-GCB1/ W12IM3S-GCB1

“ERGONOMIC WORKPLACES WITH ENHANCED USABILITY”

- 12.3”, 1920 x 720 panel with projected capacitive multitouch screen
- Intel® Celeron® Elkhart Lake N6211 processor, Windows 10 IoT Enterprise, Linux OS (Optional) (W12IE3S-GSB1), Windows 11 IoT Enterprise (Optional), Windows 11 Pro 64 bit (Optional)
- IM Series: ARM A53 Quad Core 2.0GHz CPU, Android 11, Linux OS (Optional) (W12IM3S-GCB1)

Optical bonding for sunlight viewability
Front IP65 for protection against water and dust
Fanless cooling system and ultra-low power consumption
Shock and vibration resistance according to MIL-STD-810H (W12IM3S-GCB1)

Custom Configuration

Up to 16 GB — Memory

Up to 512 GB — Storage

HDMI

Bluetooth

Application

Mobile Integration

UNLEASH LOGISTICS BEYOND BOUNDARIES

The 12.3" Panel PC isn't confined to warehouse walls. It seamlessly integrates into mobile environments too. With adaptable power input, rugged design, and versatile operating system options, this dynamic device becomes the ultimate co-pilot for delivery vehicles, enhancing route navigation, real-time updates, and on-the-go control.

Custom Configuration

RFID Reader

Barcode Reader

WWAN

Application

Easy to Use, Ready for the Field

RUGGED MOBILITY FOR EVERY INDUSTRY

The M700DQ9 enhances frontline productivity with its sunlight-readable 7-inch display and responsive performance powered by Qualcomm and Android 13. Its IP65 durability allows workers to manage tasks outdoors or in dusty, busy environments without interruption. From inventory checks and equipment inspections to logistics coordination and warehouse operations, the M700DQ9 supports fast data capture and smooth workflow execution wherever the job takes you.

M700DQ9 Series Rugged tablet

M700DQ9

NEW PRODUCT

“RUGGED POWER ON THE GO.”

- 7" Android tablet, 1280 x 720 TFT Panel with direct optical bonding (S101M9L)
- Qualcomm® QCS6490, Octa-Core, up to 2.7GHz
- Android 13.0

IP65 Waterproof and dustproof
Optional 1D/2D Barcode Reader
Support WLAN, BT, GPS/GLONASS
Ambient Light Sensor, E-Compass, Gyro, Acceleration Sensors
8MP Front Camera
Compliant with SOTI MobiControl

TC605 Series Rugged Handheld Computer

TC605

NEW PRODUCT

FC CE

“DURABILITY FOR EVERYDAY USE.”

- 6"1080 x 2160 Panel with PCAP Touch
- Qualcomm® QCM4490, Octa-Core, up to 2.4GHz
- Android 13.0

IP68 waterproof and dustproof

Optional WWAN 4G and 5G

Optional Barcode Reader (0° Scan Angle or 60° Scan Angle)

Ambient Light Sensor, E-Compass, Gyro, Acceleration Sensors

8MP Front Camera ; 16MP rear Camera with Auto Focus

MIL-STD-810H Shock, vibration and drop resistance

Compliant with SOTI MobiControl

Custom Configuration

Battery Hotswap

Barcode Reader

WWAN

Universal Adapter

Screen Prctector

Rugged Protective Boots

Hand Strap

Shoulder Strap

Soft Holster

Pistol Grip

Multi-Slot Cradle

Application

Simple to Operate, Simple to Deploy

SUPERMARKET OPERATIONS

The TC605 supports daily retail tasks with its clear 6-inch display, fast performance, and optional barcode scanning for quick price checks and stock updates. With Android 13 and optional 4G/5G connectivity, staff can access inventory systems, update data, and stay connected on the sales floor. Its IP68 durability ensures reliable operation during spills, moisture, and constant handling in busy supermarket environments.

Custom Configuration

Barcode Reader (DRMBH)

NFC RFID Reader

WWAN

Application

Easy to Use, Easy to Operate

INFINITE APPLICATIONS WITH THE OPEN PLATFORM

P400RM9 offers strong compatibility, security, and live image service with HD cameras. Meets SOTIMobiControl standards, supports third-party apps, and fits diverse sectors: transportation, logistics, retail, security, energy, construction, government, hospitality, and manufacturing.

P400M9 Series Rugged Handheld Computer

P400M9/ P400M9DMR/ P400M9DMRBH

IP65

“RESILIENT AND RUGGED.”

- 4”, 800 x 480 Panel with direct optical bonding
- Cortex-A73 + Cortex-A53 (Octa-core up to 2.0 GHz)
- Android 11

Compatible PoC application
Support WLAN, BT, WWAN (Optional)
Easy to use, easy to operate
Optional DMR (P400M9DMR / P400M9DMRBH)
Optional VHF/ UHF Radio (P400M9DMR / P400M9DMRBH)

P500M9 Series Rugged Handheld Computer

P500M9/ P500M9DMR

IP65 FC CE

“ ROBUST AND RELIABLE. ”

- 5”, 1280 x 720 Resolution
- CortexA73 + CortexA53 (Octacore up to 2.0 GHz)
- Android 11

IP65 waterproof and dustproof
Optional 1D/2D Barcode Reader for data collection
Optional NFC function
Optimized Mechanism Design for handheld
Optional DMR (P500M9DMR)
Optional VHF/ UHF Radio

Custom Configuration

Barcode Reader (DRMBH)

NFC RFID Reader

WWAN

Application

Simple to Navigate, Simple to Manage

LIMITLESS POSSIBILITIES WITH THE OPEN INTERFACE

P500RM9 boasts robust compatibility and security, enhanced by HD cameras for live image services. It aligns with SOTIMobiControl standards, facilitates third-party app integration, and caters to a wide range of industries, including transportation, logistics, retail, security, energy, construction, government, hospitality, and manufacturing

Custom Configuration

WWAN

WWAN

RFID

NFC RFID Reader

Barcode Reader (E500RM9)

Smart Card Reader (E500RM9)

Battery Hotswap (E500RM9)

Fingerprint Reader (E500RM9)

Application

Courier Shipping Service

COMPACT AND DURABLE HANDHELD COMPUTER

Rugged specifications of the compact E500QK handheld computer mean that personnel can take photos, enter data, and take photos in any harsh environment. The latest Android operating system offers tremendous potential for developing or adapting mobile computer applications.

5" Android Rugged Handheld Computer

E500RM9/ E500QK

IP65 IP67

"RUGGED DESIGN BUILT TO SURVIVE."

- Android 11.0, ARM A73 x 4 (2.0 GHz) + A53 x 4 (E500RM9)
- Android 9.0, Qualcomm® Snapdragon™ 660 (Octa-core 2.2 GHz) (E500QK)
- 5", 1280 x 720 Panel with direct optical bonding

Optical bonding for sunlight viewability
8 MP webcam, 13 MP rear camera with autofocus
WLAN, BT, GPS/ GLONASS
Ambient light sensor, E-compass, Gyro, acceleration sensors
IP65 and IP67 waterproof and dustproof

4.3" Android Rugged Handheld Computer

E430RQ8

"RUGGED EFFICIENCY ON-THE-GO."

- 4.3", 800 x 480, PCAP touchscreen
- Qualcomm® Snapdragon™ 660 (Octa-Core 2.2 GHz)
- Android 9.0

8 MP webcam, 13 MP rear camera with autofocus
Ambient light sensor, E-compass, Gyro & acceleration aensors
WLAN, BT
USB 3.0 Type C (OTG), docking connector
NFC (Read / Write, Peer-to-Peer mode)(Optional)
260g lightweight portability
IP65 waterproof and dustproof
MIL-STD-810G shock, vibration and drop resistance

Custom Configuration

Barcode Reader

NFC RFID Reader

Application

Delivery Services

RUGGED MOBILITY IN A POCKET-SIZED DEVICE

A famous chain store now uses versatile 4.3" Rugged Mobile Computer E430 with integrated 1D/2D barcode scanner to increase delivery services' efficiency. Ultimate productivity and data collection tools combined in a pocket-sized device to speed up delivery time and increase customer satisfaction.

Custom Configuration

WWAN

WWAN

NFC RFID Reader

SIM Card Slot

Application

Easy In-Vehicle Installation

SUPPORTS BOTH VESA AND RAM MOUNTS

Winmate FM07M supports both VESA mount and RAM mounts to help you save the time and ease installing the vehicle-mounted computer. The FM07M is easily mounted and fully-rugged, helps you to have higher work efficiency.

7" ARM A53 Android Vehicle Mounted PC

FM07M

IP65

MIL-STD 810H

FC CE

"VEHICLE POWER SOLUTION."

- ARM A53 Quad Core 2.0GHz Processor
- 7", 1024 x 600 panel with Projected Capacitive Multi-Touch screen
- Android 11, Linux Yocto, Linux Ubuntu OS

Wide power input 9-24V DC with ignition
Wide-range operating temperature
RAM mount, support VESA mount
M12 waterproof connectors , IP65 waterproof and dustproof
Shock and vibration resistance according to MIL-STD-810H

7" Windows Forklift Computer

FM07P

"FORKLIFTS POWERED BY INTELLIGENCE"

- Intel® Celeron N3350 (Apollo Lake) Processor
- 7", 1024 x 600 panel with P-CAP
- Wide power input 9-36V DC with ignition
- Windows 10 IoT Enterprise, Linux, Ubuntu 20.04 (Optional)

Wide operating temperature range -20°C to 60°C
IP65 waterproof and dustproof
Shock and vibration resistance according to MIL-STD-810G
Programmable function keys
Built to survive the extreme temperature range
Wide power input 9-36V DC with ignition optional isolation power solution

Custom Configuration

Up to 8 GB Memory

Up to 128 GB Storage

WWAN GNSS

Bluetooth

Application

Warehouse Operations

EFFICIENCY AT EVERY ELEVATION WITH FORKLIFT TECH

Winmate's forklift computers seamlessly integrate into warehouse vehicles, with versatile mounting options and high-performance Intel processors that enhance inventory management and reduce errors.

Custom Configuration

Up to 8 GB
Memory

Up to 16 GB
Memory (FM07E)

WWAN
WWAN

Application

Warehouse Management

IMPROVE OPERATIONAL EFFICIENCIES WITH VEHICLE MOUNTED COMPUTERS

Winmate's vehicle-mounted computers are designed to fit seamlessly into forklifts and other vehicles in a warehouse complex. With a range of mounting options and high-performance Intel processors to choose from, these VMCs can minimize errors and streamline inventory management.

7" Windows Vehicle Mounted Computer

FM07/ FM07E

IP65 MIL-STD 810G E13 FC CE

"VIBRATION AND SHOCK-PROOF DESIGN."

- Intel Celeron N3350 or Intel Pentium N4200 (FM07)
- Intel Atom® x6413E(FM07E)
- 7", 1024 x 600 panel with projected capacitive Multi-Touch screen
- Wide power input 9-36V DC with ignition
- Windows 10 IoT Enterprise, Linux, Ubuntu 20.04 (Optional), Windows 11 IoT Enterprise LTSC (64 bit) (Optional)

IP65 waterproof and dustproof

Shock and vibration resistance according to MIL-STD-810G

Programmable function keys

Built to survive the extreme temperature range

10.4”/ 12.1” Windows Vehicle Mounted PC

FM10E/ FM12E

IP65 MIL-STD 810G MIL-STD 810H FC CE

“ DATA COLLECTION IN LOGISTICS APPLICATIONS. ”

- 1024 x 768 Panel with PCAP Touch
- Intel® Elkhart Lake x6413E Processor
- Windows 10 IoT Enterprise / Windows 11 IoT Enterprise (Optional)

1x SO-DIMM, DDR4 3200, 4 GB Memory
WLAN, BT, GPS/AGPS
G-Sensor, light sensor, temperature sensor
2 MP front camera
Screen blanking function for driver's safety
RAM mount, support VESA mount
Power input 10-60V DC with ignition control
IP65 waterproof and dustproof
MIL-STD-810H vibration, shock resistant

Custom Configuration

Up to 4 GB — Memory

Up to 512 GB — Storage

WWAN — WWAN

Application

Forklift Automation

ULTRA-RUGGED TOUCH SCREEN FOR THE TOUGHEST ENVIRONMENTS

The large screen with the latest mobility platform for future-proofing, and features that will make the transition to a completely different OS as painless as possible.

Custom Configuration

WWAN

GPS/ GLONASS

UPS Battery

Brightness

CANBUS

DIDO

Audio

Application

Reliable And Rugged

WORKABLE IN HOT AND COLD WAREHOUSE

To meet the challenging nature of cold chain solutions, our rugged computers are built with thermal sensors to automatically activate and deactivate the defroster (optional) to avoid inner condensation and provide stable performance.

10.4”/ 12.1”/ 14” Android Forklift Computers

FM10Q-V/ FM12Q-V/ FM14Q-V

IP65 FC CE

“WIDE RANGE OPERATING TEMPERATURE.”

- All in one design, Integrated I/O function
- Qualcomm Snapdragon™ 660 octa-core, 2.2 GHz CPU, Android 9
- 10.4”/ 12.1”, 1024 x 768 Panel with PCAP touchscreen
- 14”, 1920 x 1080 Panel with PCAP touchscreen

Wide power input 10-60V DC with ignition

Wide range operating temperature

Support VESA mount

Compact housing with anti-scratch P-Cap multi-touch screen

Vibration and shock-proof design ensure reliable performance

IP65 waterproof and dustproof vehicle mounted computer

10.4”/ 12.1”/ 14” Windows Vehicle Mounted PC

FM10AD-V/ FM12AD-V/ FM14AD-V

IP65 MIL-STD 810H FC CE

“ENABLE AUTOMATION IN THE WAREHOUSE.”

- All in one design, Integrated I/O function
- 12th Gen. Intel® Processor Family – Alder Lake Processor
- 10.4”/ 12.1”, 1024 x 768 Panel with PCAP touch screen
- 14”, 1920 x 1080 Panel with PCAP touch screen

IP65 waterproof and dustproof
Wide power input 10-60V DC with ignition
Wide range operating temperature
Support VESA mount
1 x USB 2.0 port, 1 x USB 3.0 Type-C (OTG), 2 x COM Port, 1 x Micro SD card slot, 1 x SIM card slot, 1 x LAN, 1 x DIDO (Optional),1 x CANBUS (Optional), 1 x Audio (Optional)

Custom Configuration

Application

Advanced Communications

ENABLE UNINTERRUPTED COMMUNICATIONS

In a large warehouse environment, forklifts usually go back and forth between the cold and regular ambient storage. The rugged computers must show the same stable performance in both low and high temperatures.

Custom Configuration

WWAN

WWAN GPS/ GLONASS UPS Battery

Brightness CANBUS DIDO

Audio

Application

Minimize Errors and Streamline Inventory Management

WITH A RANGE OF MOUNTING OPTIONS

The vehicle mounted computers or tablet PCs installed on a forklift must be rugged enough to withstand all-day operations with vibration from the vehicle.

10.4"/ 12.1"/ 14" Windows Vehicle Mounted PC

FM10E-V/ FM12E-V/ FM14E-V

IP65 MIL-STD 810H FC CE

"WIDE RANGE OPERATING TEMPERATURE."

- All in one design, Integrated I/O function
- Intel® Elkhart Lake x6413E Processor
- 10.4"/ 12.1", 1024 x 768 Panel with PCAP touch screen
- 14", 1920 x 1080 Panel with PCAP touch screen

IP65 waterproof and dustproof
Wide power input 10-60V DC with ignition
Wide range operating temperature
Support VESA mount

10.4”/ 12.1” Android Vehicle Mounted PC

FM10Q/ FM12Q

“FOR YOUR UNIQUE ANDROID IN-VEHICLE APPLICATION.”

- 1024 x 768 with PCAP touchscreen
- Qualcomm® Snapdragon™ 660 octa-core, 2.2 GHz
- Android 9.0

RAM mount/ VESA mount
Field replaceable front panel to reduce service costs
IP65 waterproof and dustproof
Wide range -30°C to 60°C operating temperature
GPS/ GLONASS, G-Sensor, Temp. Sensor
Aluminum Alloy Housing
Fanless design
1 x USB 3.0 Type-C (OTG) (tablet), 1 x DB9 connector for 2 x USB 2.0 port (docking)

Custom Configuration

WWAN

WWAN

Brightness 800 nits

UPS Battery

GPS

Application

Forklift Automation

MEETING A VARIETY OF CUSTOMER REQUIREMENTS

Winmate's FM10Q/FM12Q are powerful vehicle mounted computers that features a Qualcomm® Snapdragon™ 660 CPU and Android 9.0 operating system. The Android-based platform allows fast development of a variety of customized applications for every level across the enterprise.

Custom Configuration

Up to 8 GB — Memory

Up to 512 GB — Storage

Barcode Reader

WWAN — WWAN

RFID — RFID Reader

Micro HDMI Port

Smart Card Reader

USB/ RS-232 — Expansion Port

VESA Mount Kit

Carry Bag

Shoulder Strap

Application

Distribution Center

IMPROVES OPERATOR PRODUCTIVITY

The M101EKB can handle the challenges of the modern warehouse, even in cold storage environments. The QWERTY keypad allows comfortable typing even while wearing thick gloves. The detachable front panel provides mobility for forklift operators who wish to perform tasks outside the forklift.

8" Windows Vehicle Mounted PC

M101EKB

"QWERTY KEYPAD TO INPUT DATA IN ANY CONDITIONS."

- Intel® Elkhart Lake Celeron® N6211 Processor
- 8", 1280 x 800 wide viewing angle with PCAP touch
- Windows 10 IoT Enterprise LTSC
  Windows 11 IoT Enterprise LTSC (Optional)

IP65 waterproof and dustproof
ISO/IEC 9995-3 QWERTY Keypad
Removable battery with hotswap function for all day productivity
MIL-STD-810H rugged housing
Optional extendable UHF RFID reader
Optional built-in 1D/2D barcode, HF RFID reader

8" Windows Rugged Tablet

M900P/ M900PT

"ORTABLE AND POWERFUL SOLUTION."

- 8", 1280 x 800, PCAP touchscreen
- Intel® Pentium® N4200 (Up to 2.5 GHz)
- Windows 10 IoT Enterprise

4 GB LPDDR4, 128 GB SSD
Light sensor, g-sensor, Gyro
2 MP webcam, 8 MP rear camera with autofocus
WLAN, BT, GPS, GLONASS
USB 3.0 (Type A), USB 3.0 (Type C), docking connector
D-sub for vehicle gateway connection
Built-in smart card reader (Default M900PT)
IP65 waterproof and dustproof
MIL-STD-810G shock, vibration and drop resistance

Custom Configuration

Up to 8 GB — Memory

Up to 512 GB — Storage

RFID — HF RFID Reader

Barcode Reader

WWAN — WWAN

Application

Connected Truck

CONNECTIVITY FOR VEHICLES ON THE ROAD

Winmate developed a smart truck solution for a heavy-duty vehicle. Installed on a dashboard using a vehicle cradle, the 8" rugged tablet M900P and custom-designed vehicle gateway VG-100 now connects in-vehicle systems and allows status monitoring of semi-trucks in Europe.

Custom Configuration

NFC RFID Reader

Barcode Reader

WWAN

Battery Warm Swap

Application

Documentation Access

WORK SIMPLER, FASTER, AND BETTER WITH WINMATE RUGGED TABLET

The integration of Android rugged tablets for documentation access transformed the logistics company's warehouse and logistics operations. By digitizing critical documents and fostering real-time communication, they achieved increased efficiency, reduced errors, and improved overall productivity.

10.1" Android Rugged Tablet
S101M9/ S101M9L

"ROBUST TABLET TO WITHSTAND INDUSTRIAL USE."

- 10.1", 1280 x 800 TFT LCD Display (S101M9L)
- 10.1", 1920 x 1200 TFT LCD Display (S101M9)
- Android 11.0
- ARM A73 x 4 (2.0 GHz) + A53 x 4 (2.0 GHz)

4 GB RAM + 32 GB eMMC
8.0 MP camera in front side, 13.0 MP rear camera (with LED auxiliary light, auto focus)
Anti-glare touch treatment
WLAN, BT, GPS, GLONASS, WWAN (Optional)
Integrated 1D/2D barcode reader (Optional)
Integrated NFC module (Optional)
SOTI MobiControl compliance

10.1" Windows Rugged Tablet

S101TG/ S101EK

"OPTIMUM SIZE, MAXIMUM PRODUCTIVITY."

- 10.1", 1920 x 1200 WUXGA with PCAP touch
- 11th generation Intel® Tiger Lake processor (S101TG)
- Intel® Elkhart Lake Celeron® N6211 (S101EK)

8 GB DDR4, 256 GB SSD, micro SDXC card slot
Light sensor/ g-sensor/ Gyro
2MP Webcam , 8MP Auto-focus rear camera
Anti-glare touch treatment
USB 3.0 Type-A, USB 3.0 Type-C, RJ45-10/100/1000 GigaLAN port, Micro SDXC slot, docking connector
WLAN, BT, GPS, GLONASS
Support hand/ gloves and rain mode for touch screen
MIL-STD-810H shock, vibration, and drop resistance

Custom Configuration

Up to 32 GB Memory (S101TG)

Up to 2 TB Storage (S101TG)

Up to 512 GB Storage (S101EK)

WWAN

Barcode Reader

USB/ UART Expansion Port

Battery Hotswap

Application

Inventory Control

MANAGE, OPTIMIZE. THRIVE

The future of inventory management in warehouse logistics depends on tech integration. Windows rugged tablets have boosted productivity, accuracy, and customer satisfaction. These devices will stay at the forefront of innovation as the industry evolves, helping businesses meet fast-paced logistics demands.

Custom Configuration

Memory Storage WWAN

GigaLAN Port Barcode Reader HF RFID Reader

Application

Machinery & Equipment Inspections

HIGH PROCESSING POWER AND BRILLIANT TOUCH SCREEN

The M116TG features high processing power and a brilliant 11.6" touch screen, ideal for checking operation manuals and SOP procedures for live inspection and production supervision.

11.6" Windows Rugged Tablet
M116TG

"HIGH PROCESSING POWER IN A RUGGED ENCLOSURE."

- 11.6", 1920 x 1080, 850 nits IPS LED Panel with direct optical bonding
- Intel® Core™ i5-1135G7 Tiger Lake processor
- Windows 11 IoT Enterprise

IP65 waterproof

Dustproof, MIL-STD-810H shock, MIL-STD-461G, vibration and drop resistance

Sunlight readable with antiglare solution

Hotswappable battery design

USB Type-C port support power delivery 20V-in

11.6" Windows Rugged Tablet
M116P/ M116PT

"BRILLIANT SUNLIGHT READABLE SCREEN."

- 11.6", 1920 x 1080, PCAP touchscreen
- Intel® Pentium® N4200 1.1 GHz, up to 2.5 GHz
- Windows 10 IoT Enterprise

4 GB LPDDR4, 128 GB SSD

Light sensor, G-sensor, Gyro

2 MP webcam, 8 MP rear camera with autofocus

WLAN, BT, GPS, GLONASS, WWAN (Optional)

USB 3.0 (Type A), USB 3.0 (Type C)

Integrated Smart Card Reader (M116PT)

IP65 waterproof and dustproof

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

Custom Configuration

Up to 8 GB — Memory

Up to 512 GB — Storage

WWAN

GigaLAN Port

Barcode Reader

RFID — HF RFID Reader

Application

Logistical Operations

SUITABLE FOR FACTORY ENVIRONMENT

The M116P series rugged tablet features high processing capabilities, wireless connectivity options, and data capture modules for extraordinary performance.

Custom Configuration

Up to 32 GB — Memory

Up to 2 TB — Storage

WWAN — WWAN

Smart Card Reader (M140TGT)

RFID Reader

GNSS

Battery Hotswap

Application

Where Workflow Meets Simplicity

PRECISION IN EVERY TAP AND SWIPE

Our 14" Windows rugged tablet is your ultimate tool for streamlining order management. With a spacious screen, it brings clarity to details, specifications, and shipping instructions

14" Windows Rugged Tablet

M140TG/ M140TGT

MIL-STD 810H COMPLIANT · IP65 · FC CE

"EFFICIENT LOGISTICS THROUGH INFORMATION GATHERING"

- 14", 1920 x 1080 wide viewing angle LED Panel
- 11th Gen. Intel® Processor Family – Tiger Lake Processor
- Windows 11 IoT Enterprise LTSC

Optical bonding and Antiglare technology for sunlight readability

WLAN, BT, GPS/GLONASS (Optional)

G-Sensor, Light sensor, Gyro

2 MP front camera, 8 MP rear camera with auto foucs

Hot-swappable battery for whole day work

IP65 waterproof and dustproof

MIL-STD-810H vibration, shock resistant

75x75 VESA Mount

Integrated Smart Card Reader (M140TGT)

14" Windows Rugged Tablet PC
D140

BEYOND BOUNDARIES, ELEVATE INDUSTRIAL INNOVATION.

- Intel® Core™ i5-1235U Alder Lake processor
- 14-inch tablet, 1920 x 1080 wide viewing angle LED Panel
- Projected Capacitive Touch screen with Stylus

ABS Composite Material Housing with All-Around Elastomeric Rubber

Thermal design with fan cooling system

Built in stylus holder for left/right hand usage

Custom Configuration

Up to 2 TB — Storage

WWAN — WWAN

Application

See The Data With Less Scrolling

USE IT AT EASE ANYWHERE AND EVERY TIME

Winmate's D140 rugged tablet seamlessly integrates into the workflow, ensuring a secure and efficient user experience.

E430RQ8
4.3" RUGGED HANDHELD PDA

FM10Q
10.4" VEHICLE MOUNTED COMPUTER

FM12AD-V
12.1" VEHICLE MOUNTED COMPUTER

FM14E-V
14" VEHICLE MOUNTED COMPUTER

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