

PUBLIC SAFETY



MISSION CRITICAL PUBLIC SAFETY

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.

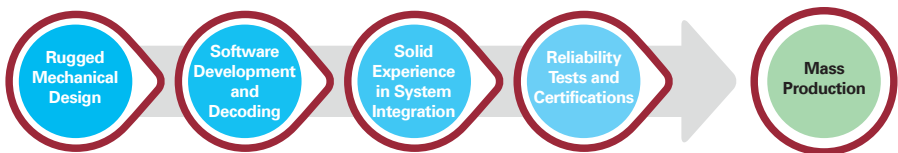
From product design to accessories, our engineering team designs and support the system integration process.

- 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

Government, Safety & Security

Overview

To ensure that Public Safety agencies such as Police, Fire, and EMS Emergency Medical services can operate effectively, public safety responders rely on radio communications.

Our rugged mobile computers include:

- Radio Gateway - RG 100
- 4" ARM A73 + A53 Rugged Handheld Computer - P400M9
- 4" Multi-mode PoC Radio with Barcode Reader-P400M9-DMRBH
- 4" Multi-mode PoC Radios-P400M9-DMR
- Larzio Cloud Service solution (powered by Winmate)

Industrial Challenges

As cities continue to develop, rapid increase in population poses new challenges to public safety management:

- A single emergency event involves many teams from the fire department, police, emergency medical services, civilians using different radio networks ranging from VHF, UHF to LTE/ 4G phones, integrate them into a network system is a challenge.
- The simple voice communication can no longer meet the diverse needs of users, there are future requirement for multimedia service applications such as images, videos, and positioning.
- Achieve long-distance communication and get rid of the shackles of distance between command center and field.
- Need a way to record all the communication history for tracking in case.

Technology

Application-focused features:

- Customer-oriented services
- Integrate legacy and modern devices
- Closing the boundaries of the radio network
- Supports wide applications



THE FUTURE OF CRITICAL COMMUNICATIONS WITH MULTI-MODE ADVANCED POC RADIOS



MULTI-MODE ADVANCED POC RADIOS

Built around the Android platform, Winmate PoC solutions gives the best of a modern mobile phone, including an intuitive and familiar interface. Access to all your favorite utilities and the ability to make mobile calls also browse the web. The P400M9 also incorporates all the essential features you would expect from a PoC radio, including dedicated PTT and emergency buttons, a talkgroup rocker switch, and long battery life.



RADIO GATEWAY

Winmate solves interoperability challenges with RG100 with voice and radio interoperability in a single tiny box. By connecting up to two donor radios directly to the RG100, users can instantly bridge the gap between disparate radio networks, endpoints, or frequencies, allowing seamless communications between.



RUGGED LAPTOP

Winmate Rugged Laptop is an innovative solution designed to help the challenging work of the public sector, where other technology often fails. It can easily tolerate the harshest environments while sustaining its function.

Winmate and Larzio

Overview

To enhance communication efficiency in the public safety industry, Winmate collaborates with Larzio to introduce a cloud computing solution, tailored for the public safety industry.

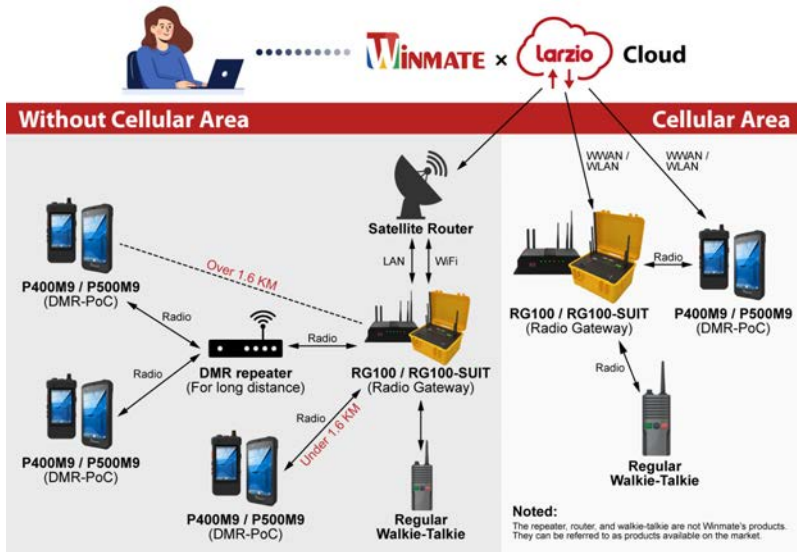
Larzio revolutionizes communication with a fundamental concept of "talk." This approach mimics the simplicity of walkie-talkies, allowing users to engage in instant voice calls with the press of a button while meticulously recording the details of each interaction.

Designed for versatility, Larzio seamlessly connects multiple radios, PoC devices, walkie-talkies, and Radio Gateways, ensuring comprehensive and efficient communication in various scenarios.

Through Winmate Public Safety solutions and Larzio's cloud computing solutions, we deliver comprehensive end-to-end solutions that bring benefits not only to the public safety sector but also extend their advantages to other industries.

Larzio Key Features:

- Precise AR Positioning
- Instant Voice Call
- Versatile PoC Device Connectivity
- Easy Integration with Radios



Application Story

Access Critical Information



Background

According to information gathered by the United States Fire Administration, Fire kills over 3,000 people each year in America and causes billions of dollars in damage. Firefighters must constantly monitor the situation while getting relevant information from the central command center and local fire stations directly to the fire trucks.

Attracted by Winmate's credibility as the premier supplier of rugged enterprise mobility and industry-leading services, a fire department of metropolitan areas in Northern Europe bought Winmate's rugged laptop to provide real-time info to the fire department and emergency medical services.

Core Products

- Winmate 13.3" Rugged Laptop L140AD-3

Main Challenges

- Greater Comfort
- Hot-swappable battery design for uninterrupted operation in the field

“
ANTI GLARE TECHNOLOGY FOR SUNLIGHT READABILITY.
”

Why Winmate

- Rugged and versatile with a sunlight-readable display
- MIL-STD 810H and IP65 rating defines how resistant the laptop is when subjected to a dirty/dusty environment, moisture, and water splash
- Large 13.3" inch display with a convertible form factor
- Easy deployment and maintenance



Application Diagram: Large 13.3" inch display with a convertible form factor.

Application Story

Empowers Fire and EMS Departments



Background

Major forest fires involve multiple civil defense teams from the fire department, police, and medical services. Intercommunication between all emergency response teams is essential for coordinating rescue operations and timely medical assistance. However, the fire, police, and medical services use different communication devices on various radio networks, which results in a lack of interconnection between the teams.

Winmate Radio gateway RG100 solves this problem by interconnecting both narrowband and broadband communication devices. With RG100 Radio Gateway and Larzio, the operator and Command can directly contact teams in different channels to organize the best rescue operations.

Core Products

- Winmate Radio Gateway - RG100
- Winmate Multi-mode PoC Radios - P400M9
- Larzio Cloud Service solution (powered by Winmate)

“
PROVIDING
REAL TIME
SITUATIONAL
UPDATES.
”

Main Challenges

- Diversified communication devices
- Integration with legacy radio equipment
- Radio communications are limited by coverage distance
- No option to record radio conversations

Why Winmate

- Customer-oriented services
- Integrate legacy and modern devices
- Closing the boundaries of the radio network
- Supports wide applications



Application Diagram: Winmate radio solutions are applicable in various challenging scenarios.

Application Story

Tunnel Operation



Background

The 500km tunnels is vital to the Northern Ireland economy and has transported IoT sensor data. For its cable tunnels operation, customers require seamless communication solutions to connect teams at any time. With Larzio APP cloud service and RG100 Radio Gateway, the events hosting staffs can contact the team with high efficiency and flexibility. With radios, telephones, and Apps, the team members can react promptly to any situation.

Combines the benefits of radio and the Internet without changing the user pattern. Through Digital Signal Processor (DSP) and communication protocol technology, the radio audio can be encoded, compressed, and sent through Internet as an information packet. Then, the information packet on the Internet can be decompressed, decoded, and sent through public telecom networks as audio.

Core Products

- Winmate Radio Gateway - RG100
- Winmate Multi-mode PoC Radios - P400M9
- Larzio Cloud Service solution (powered by Winmate)



**GET STARTED
WITH A RADIO
EXPERIMENT.**

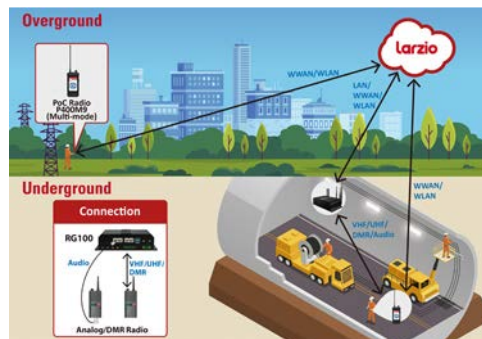


Main Challenges

- APP SW Teamwork Cloud application
- Extra ESD protection required
- Provides a digital radio solution to secure voice and data communications along the international route of the power pipeline

Why Winmate

- Enhanced compatibility and APP SW powered by Larzio
- Larzio Teamwork Cloud



Application Diagram: Through Larzio Group Chat, there's no need to make multiple calls and transfers to the people in charge.

Application Story

Rugged and Reliable



Background

Law enforcement officers are constantly in motion and essentially require fast and reliable information and communications. Winmate's L140AD rugged laptop makes it possible for police officers to turn their cars into mobile workplaces.

When selecting a laptop, law enforcement agencies need to consider how this particular gadget works with all the applications they need to use for the task. These agile products enable officers to investigate and document an incident or accident, record witness accounts, and seamlessly retrieve and share this information. Winmate 14" L140AD Rugged Laptop can lead to improved security as well. For example, officers may work more quickly when filing an accident report and spend less time on the road.

Core Products

- Winmate L140AD-4 Rugged Laptop Series

Main Challenges

- Certified IP65 rating and MIL-STD-810H for public safety and military applications
- Enterprise mobility solution

Why Winmate

- Rugged modular design
- MIL-STD 810H and IP65 rating define
- Large 14" inch display with a convertible form factor
- Easy deployment and maintenance

“
**ARDUOUS
WORK OF
PUBLIC SAFETY
AGENCIES.**
”



Application Diagram: Easy maintenance

Application Story

Advanced Deployment



Background

The old Hotel in Hualien, Taiwan, suddenly collapsed during the demolition. The whole building was lying horizontally across the street. With the casualties unknown, The Hualien County Police Department urgently reviewed footage of CCTV cameras along the road following reports that the building had crushed a scooter rider. Meanwhile, the Hualien County Fire Department's Special Search Brigade activated the search and rescue plan program using a life detector to confirm the location.

Winmate offers a rugged tablet computer that supports in-car mounting and carry-on hand; it is user-friendly and easy to use. It provides 4G LTE WWAN, WLAN, GPS, and BT for better communication; also certified by MIL-STD-810G and IP65 standards. Winmate solution brings you ruggedness and helps to increase productivity.

Core Products

- 10.4" Ultra Rugged Tablet R10IP8M-RTT2GP

Main Challenges

- Fast signal transmissions and powerful performance
- Easy to carry and use IT devices in any challenging conditions
- Strongly made Tablet PCs and capable of withstanding rough handling

Why Winmate

- Implement the latest technologies to support user's needs
- Design to survive harsh environment
- Robust communication anytime and anywhere
- Easy deployment and maintenance

“**SUPPORT URBAN SEARCH AND RESCUE TO SAVE LIVE SAFELY AND EFFICIENTLY.**”



Application Diagram: Onsite officers are using the rugged tablet

Custom Configuration



Barcode
Reader
(DRMBH)



NFC RFID
Reader



WWAN
WWAN

Application



Easy to Use, Easy to Operate

INFINITE APPLICATIONS WITH THE OPEN PLATFORM

P400M9 features high compatibility and security performance with rear HD and front cameras for real-time image service and video monitoring. With SOTIMobiControl compliance and support third-party applications for developing customized applications. Suitable for many industries, such as transportation and logistics, retail, security, energy and utilities, construction, councils and local government organizations, hospitality, manufacturing, and others.

P400M9 Series Rugged Handheld Computer

P400M9/ P400M9DMR/ P400M9DMRBH



“ **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

P500M9 Series Rugged Handheld Computer

P500M9/ P500M9DMR



Custom Configuration



Barcode Reader (DRMBH)



NFC RFID Reader



WWAN

Application



Limitless Communication

FAST COMMUNICATIONS WITH WIDE RANGE NETWORKS

The P500M9 offers network versatility, freeing users from specific mobile operators for enhanced flexibility and convenience in harsh environments. It also delivers faster data transfer and reduced latency, ensuring efficient communication.



“ **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

Radio Gateway Suitcase RG100-SUIT



FCCE

“OPTIMIZE RESCUE
EFFICIENCY.”

- Wireless Connection(4G/WLAN) Radio Gateway
- Support DMR, either one VHF / UHF
- Secured Recording (Win Radio Cloud)

Migrate existing analog or digital radio systems with ease

Equipped with 108.5Wh battery

Application



Enhancing Cross- Departmental Communication

UNIFYING CHANNELS FOR SEAMLESS TEAM INTERACTION

The RGS100-SUIT enables cross-departmental communication during emergencies by connecting various channels to a unified group, ensuring seamless interaction among all teams communications between organizations.

Radio Gateway RG100



FCCE

“OPTIMIZE RESCUE
EFFICIENCY.”

- Wireless Connection(4G/WLAN) Radio Gateway
- Secured Recording(Inbox/ Larzio Cloud)

Radio Interoperability (Narrowband and Broadband)

Migrate existing analog or digital radio systems with ease

Application



Interoperability Challenges

CONNECTING PUBLIC SAFETY

Winmate solves interoperability challenges with RG100 with voice and radio interoperability in a single tiny box. By connecting up to two donor radios directly to the RG100, users can instantly bridge the gap between disparate radio networks, endpoints, or frequencies, allowing seamless communications between organizations.

Custom Configuration

Up to
64 GB

Memory

Up to
2 TB

Storage
2nd SSD



WWAN



Fingerprint
Scanner



HF RFID
Reader



Brightness

4K

Ultra HD
HDMI 4K
Output



NVIDIA
Graphic Card

15.6" Defense Rugged Laptop L156AD Series

**NEW
PRODUCT**



**“ BOOST PERFORMANCE
WITH AI. ”**

- Optional discrete NVIDIA Graphic card
- 15.6" FHD resolution options to fulfill diverse applications
- Windows 10 IoT Enterprise

Application



Elevate Your Visual Experience with Enhanced Resolution.

PLANNING AND PRODUCTION DEMAND

Winmate 15.6" Rugged Laptop has been enhanced with cutting-edge processors, experiencing a 35% performance boost compared to earlier generations and achieving an impressive peak clock rate of 5.0GHz.

Anti-glare technology for sunlight readability

Projective capacitive touch supporting switchable rain/glove/ stylus modes

Magnesium alloy enclosure with double injection for drop protection

IP65 waterproof and dustproof

WLAN & WWAN 4G/5G (Optional)

Dual battery with hot-swappable design for whole-day-work

13.3" / 14" Windows Rugged Laptop L140AD Series



“ INTELLIGENT WORKLOAD OPTIMIZATION. ”

- 13.3 / 14" , 1920 x 1080 LED panel with direct optical bonding
- 12th Gen. Intel® Processor Family – Alder Lake Processor
- Windows 10 IoT Enterprise

Anti-glare technology for sunlight readability

Projective capacitive touch supporting switchable rain/glove/ stylus modes

Flip design for quick switching between rugged laptop and rugged tablet modes

Magnesium alloy enclosure with double injection for drop protection

IP65 waterproof and dustproof

WLAN & WWAN 4G/5G (Optional)

Dual battery with hot-swappable design for whole-day-work

Custom Configuration



Memory



Storage
2nd SSD



Rear Camera



Fingerprint
Scanner



HF RFID
Reader



WWAN



Expansion
Module

Application



Built On Advanced Hybrid Architecture

SUPPORTING FUTURE BEST-IN-CLASS PERIPHERALS

Winmate 14" rugged laptop with 12th Gen Intel® Core™ Processors provide support for DDR5 memory, as well as security and manageability features workload optimization, enhanced graphics and enhanced peripheral, connectivity, and fast memory access capabilities.

10.1" Windows Rugged Tablet M101TG

Custom Configuration



Memory



Storage



Barcode Reader



WWAN



HF RFID Reader



High Capacity Battery



Micro HDMI Port



FCC E

Application



Quality Inspection

THE PERFECT
BALANCE BETWEEN
FUNCTIONALITY AND
FORM FACTOR

The M101TG rugged tablet computers with the quality inspection software app installed serve at the quality inspection department. Maintenance of department, premises, equipment, and learning is now easier than ever with the M101TG.

“**OPTIMUM SIZE,
MAXIMUM PRODUCTIVITY.**”

- 10.1", 1920 x 1200 IPS LED Panel with direct optical bonding
- Intel® Core™ i5-1135G7 Tiger Lake processor

IP65 waterproof

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

Sunlight readable with anti glare solution

Hot-swappable battery design

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

10.1" Windows Rugged Tablet M101AD



“ BUILT TOUGH, STANDS STRONG ”

- 10.1", 1920 x 1200 IPS LED Panel with direct optical bonding
- Intel® Core i5-1235U Alder Lake Processor
- Windows 10 IoT Enterprise

IP65 waterproof

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

Sunlight readable with anti-glare solution

Hot-swappable battery design

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

Custom Configuration



Memory



Storage



Barcode Reader



WWAN



HF RFID Reader



GigaLAN Port

Application



Tough on the Frontline

DELIVERING
UNCOMPROMISING
PERFORMANCE

In the realm of public safety, tools must perform flawlessly. The 10.1" Rugged Tablet is your unwavering partner. It excels in challenging conditions, providing reliable communication and data access. When every second matters, trust this truly robust tablet.

11.6" Windows Rugged Tablet M116TG

Custom Configuration



Memory



Storage



WWAN



Gigabit
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.

“ **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

IP65 waterproof

Dustproof, MIL-STD-810H shock, 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 PC M116AD



“ RELIABLE TECH FOR WATER UTILITY MAINTENANCE. ”

- 11.6" 1920 x 1080 LCD Panel with PCAP touch
- Intel® Core™ i5-1235U (Up to 4.40GHz)
- Windows 10 IoT Enterprise

IP65 waterproof and dustproof

MIL-STD-810H shock, vibration, and drop

2MP Webcam , 8MP Auto-Focus Rear Camera

Optional GigaLAN port design

Optional 1D/2D Barcode Reader and HF RFID Reader

Built-in Mic with Noise Cancellation

Hot-swappable Main Battery

Custom Configuration



Memory



Storage



WWAN



GigaLAN
Port



Barcode
Reader



HF RFID
Reader

Application



First Responders

**UNMATCHED
PERFORMANCE AND
DURABILITY**

Winmate 11.6" rugged tablet, designed for reliability in public safety. It delivers critical information to first responders, is highly durable, and is a game-changer for professionals in the field

Custom Configuration

Up to
256 GB

Storage

Up to
2 TB

2nd Storage

Up to
32 GB

2nd Memory



14" Windows Rugged Tablet PC D140



Application



“ **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

See The Data With Less Scrolling

USE IT AT EASE
ANYWHERE AND EVERY
TIME

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

Magnesium Alloy Housing with All-Around Elastomeric Rubber

Thermal Design with Fan cooling system

Built in stylus holder for left/right hand usage

15.6" Windows Rugged Tablet PC M156AD-M1



“ **OPTIMUM SIZE,
MAXIMUM PRODUCTIVITY.** ”

- 12th generation Intel® Processor Family - Alder Lake Processor
- 15.6" FHD Panel resolution with PCAP touch

Optional discrete Nvidia & Intel Graphic card

Sunlight readable with antiglare solution

Hot-swappable battery design

USB TypeC port support PD 3.0 and ALT mode

Integrated GigaLAN Port

MIL-STD-461G and MIL-STD-810H Compliant

IP65 waterproof and dustproof

Custom Configuration



Memory



Storage



RFID



WWAN



HDMI 4K
OUTPUT

Application



R&D and Engineering

**TOUGH ENOUGH TO
WITHSTAND REGULAR
DROPS**

Light and rugged Windows-based tablet computer provide fast, accurate data collection and analytics for public safety officers.

The logo for Winmate, featuring a stylized 'W' with a red-to-white gradient and the word 'INMATE' in white capital letters to its right.

Winmate



L140AD Series

13.3"/ 14" Windows Rugged Laptop





WINMATE

M101TG



INTRODUCING THE **M101TG & M116TG** RUGGED TABLETS



Contact Us

Winmate Inc.



No. 18, Zhongxing S. St.,
Sanchong Dist.,
New Taipei City 241017, Taiwan
Tel +886-2-8511-0288
E-mail sales@winmate.com.tw
Website www.winmate.com

Winmate USA Inc.



2640 Mathews Street,
Smyrna, GA 30080, USA
Tel +1 678-653-8800
E-mail NASales@winmate.com.tw
Website www.winmate-rugged.com

TTX Canada Inc.



150 Werlich Drive, Units 5&6
Cambridge, Ontario, N1T 1N6 Canada
Tel +1-519-621-1881
E-mail Sales@ttx.ca
Website www.ttx.ca

Winmate Germany



Bgm.-Gradl-Straße 1 D-85232
Bergkirchen-Feldgeding
Tel +49 0 8131 33204-0
E-mail info@tl-electronic.de
Website www.tl-electronic.de/

京融电自动化科技(苏州) 有限公司



215100 江苏省苏州市工业园区唯新路69号
一能科技园3号楼206室
Tel +86-512-6826-6696/6829-6696
E-mail sales@winmate.com.cn
Website www.winmate.com.cn

Winmate JP office / HPC Systems Inc.



LOOP-X 8F,3-9-15 Kaigan,
Minato-ku, Tokyo 108-0022, Japan
Tel +81-3-5446-5535
FAX +81-3-5446-5550
Website www.hpc.co.jp

Follow Us

 / [Winmate Inc.](#)

 / [Winmate Inc.](#)

 / [Winmate Inc.](#)

