

PUBLIC SAFETY

**Government/
Safety & Security**



MISSION CRITICAL PUBLIC SAFETY

Q1 - 2024

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.

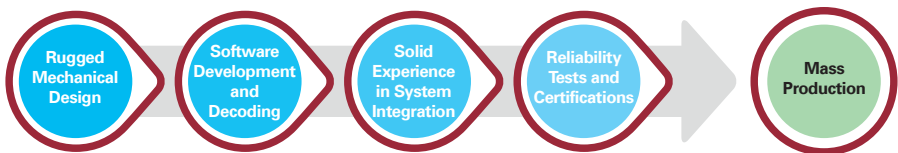
From product design to accessories, our engineering team designs and support the system integration process.

- 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

Wimate 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

Wimate 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.

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.**

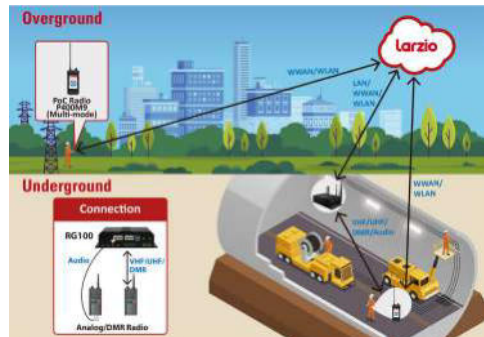


Main Challenges

- 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 L140TG 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" L140TG robust notebook computer 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 L140TG-4: 14" convertible rugged laptop

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 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 LIVES SAFELY AND EFFICIENTLY.**”



Application Diagram: Onsite officers are using the rugged tablet

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.

P500M9 Series Rugged Handheld Computer

P500M9/ P500M9DMR



Custom Configuration



Barcode Reader (DRMBH)



NFC RFID Reader



WWAN

Application



“ **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

Optional VHF/ UHF Radio

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.

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

Optional VHF/ UHF Radio

Radio Gateway RG100



FCCE

“OPTIMIZE RESCUE
EFFICIENCY.”

- Wireless connection (WWAN/WLAN) radio gateway
- Secured recording (Inbox/ Larzio cloud)

Radio interoperability (Narrowband and Broadband)

Migrate existing analog or digital radio systems with ease

Interoperable communication platform

Connecting public safety radios with IP devices

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.

Rugged Mobility Bridge Systems RG100-SUIT



FCCE

“OPTIMIZE RESCUE
EFFICIENCY.”

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.

- Ubuntu operating system
- 4GB RAM + 128GB SSD
- VHF (136~174MHz) or UHF(400~480 MHz) either one
- Wi-Fi 802.11 b/g/n, 2.4GHz
- Support LTE

Secured Recording(Inbox/ Larzio Cloud)

Support DMR, either one VHF / UHF

Wireless Connection(4G/ Wi-Fi) Radio Gateway

Migrate existing analog or digital radio systems with ease

RGS100 with 108.5Wh battery

13.3"/14" Windows Rugged Laptop L140TG-3/ L140TG-4



IC FCC CE

“ **EMPOWER THE PUBLIC
SECTOR WITH POWERFUL,
RUGGED LAPTOPS.** ”

- 13.3", 1920 x 1080, P-CAP touchscreen (L140TG-3)
- 14", 1920 x 1080, P-CAP touchscreen (L140TG-4)
- 11th Gen. Intel® Processor Family – Tiger Lake Processor
- Fanless cooling system
- Full-scale QWERTY layout keyboard

Anti-glare technology for sunlight readability

Flip design for quick switching between laptop and tablet modes

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

Expansion slot supporting optional 2nd removable SSD and smart card reader

IP65 rating and MIL-STD-810H suitable for public safety, vehicle diagnostic and military application

Custom Configuration



Memory



Storage



Camera



Smart Card
Reader



Fingerprint
Scanner



HF RFID
Reader

Application



On Field Communication

ARDUOUS WORK OF FIELD WORK

Wimate's L140TG rugged laptop makes it possible for staff member officers to turn their workbenches into mobile workplaces.

Custom Configuration



Memory



Storage
W1 2nd SSD



Camera



Fingerprint
Scanner



HF RFID
Reader

13.3" / 14" Windows Rugged Laptop L140AD-3 / L140AD-4



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.

“ INTELLIGENT WORKLOAD OPTIMIZATION. ”

- 12th generation Intel Processor Family – Alder Lake Processor
- Rugged extreme with 13.3" and 14"; 1920 x 1080 LED panel with direct optical bonding

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

WiFi-6E & optional WWAN 5G support

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

15.6" Windows Rugged Laptop L156AD Series



“ BOOST PERFORMANCE WITH AI. ”

- 13th generation Intel® Processor Family – Raptor Lake Processor
- Optional discrete Nvidia Graphic card

15.6" FHD and 4K Panel resolution options to fulfill diverse applications

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

WiFi-6E & optional WWAN 5G support

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

Custom Configuration



Memory



Storage
W1 2nd SSD



Fingerprint
Scanner



HF RFID
Reader



Ultra HD
4K
Resolution



NVIDIA
NVIDIA Graphic
Card

Application



Crank up the Resolution for an Even Better Visual Experience

PLANNING AND PRODUCTION DEMAND

Winmate 15.6" rugged laptop is upgraded with the latest 12th Gen Intel® Core™ Processors, growing 35% in performance from the previous generations, reaching the highest clock rate of 5.0GHz – achieving premium multitasking performance.

10.1" Windows Rugged Tablet M101AD

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.

“

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-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

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™ i5-1135G7 (2.40GHz, up to 4.20GHz)
- 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

Meet our 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

13.3" Windows Ultra-Rugged Tablet M133TG

Custom Configuration



Memory



Storage



Camera



GPS/
GLONASS



WWAN



Barcode
Reader



Battery
Hotswap



“**INSPIRED BY CAR MECHANICS.
DESIGNED FOR REPAIR SERVICES.**”

- 13.3", 1920 x 1080, P-CAP touchscreen
- Intel® Core™ i5 - 1135G7 2.40 GHz (up to 4.2 GHz)
- Windows 11 IoT Enterprise (Optional)

4 GB DDR4, 128 GB M.2 SSD

Light sensor, g-sensor, Gyro, E-compass

Four USB 3.0, one USB 3.0 (Type C)

Removeable kickstand usable as carrying handle

Magnesium alloy housing with allaround elastomeric rubber

IP65 waterproof and dustproof

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

Application



Uninterrupted Operations

**EFFORTLESS DATA
ACCESS,**

INSTANT INSIGHTS

Tailored for law enforcement, these tablets provide secure real-time database access with user-friendly critical information retrieval. Their robust design and rapid processing accelerate investigations, improving accuracy and efficiency

10.1" Windows Rugged Tablet 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
-

Custom Configuration

Memory	Storage	Barcode Reader
WWAN	HF RFID Reader	High Capacity Battery
Micro HDMI Port		

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.

11.6" Windows Rugged Tablet M116TG

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.

“ **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

10.1" Windows Rugged Tablet S101TG/ S101EK



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

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

4 GB DDR4, 128 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

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

Custom Configuration

Up to 32 GB	Up to 2 TB	Up to 512 GB
Memory (S101TG)	Storage (S101TG)	Storage (S101EK)
 WWAN	 Battery Hotswap	 Expansion Port
 Barcode Reader		

Application



R&D and Engineering

**TOUGH ENOUGH TO
WITHSTAND REGULAR
DROPS**

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



**MISSION
CRITICAL PUBLIC
SAFETY RADIO
COMMUNICATIONS**

CE FC

**Radio Gateway
RG100**





CE FC



PoC Radio
P400M9 Series



The logo for Winmate, featuring a stylized 'W' in red and white followed by the word 'INMATE' in white capital letters.

Winmate

A man and a woman, both in military-style clothing, are looking at a rugged laptop. The man is on the left, wearing a light blue shirt and dark vest, looking intently at the screen. The woman is on the right, wearing a camouflage jacket, also looking at the screen. The laptop is a Windows Rugged Laptop, displaying the Windows 10 desktop with various app tiles. The background is dark and industrial, suggesting a vehicle or a workshop.

**13.3" / 14"
WINDOWS RUGGED LAPTOP**



CE FC IC



L140TG-3/ L140TG-4
L140AD-3/ L140AD-4

