





# **Medical Solution**

Leading the Way! Enhanced 4K Displays Solutions for Healthcare Imaging



## Solving Challenges in the Hospital with the right Technology

Technology has long played an imperative role in streamlining hospital operations and improving patient care. Medical personnel need to be assured that each image, or streaming images, being viewed are an accurate depiction of the tissue and bone being studied.

Digital images viewed on one display station should look the same when viewed on another station. This has found to be difficult with inconsistent low level calibrated HD monitors. Adding to the difficulties are the broad categories of patient images used in medical practices; radiology images, motion video or still video images used in endoscopy, surgical, ophthalmology. Radiology images and medical video images have different performance, color calibration and details clarity requirements.

Unfortunately, most HD monitors in the market, don't provide the highest clarity and color accuracy desired.

The latest 4K medical monitors from Winmate are solving this problem with the highest quality imaging and state-of-the-art technology. This technology facilitates an ideal situation for health care professionals. Peace of mind, knowing that their equipment is of the highest clarity and color accuracy, allows them to focus on providing patients with better care, facilitate resources to optimize their operations – allowing them to reduce costs and liability.

With the number of medical display options available, knowing which will best suit your needs can be a challenge. The Winmate line of 4k monitors, implement the latest in technology, are making the decision easy.

## Features of the Winmate 4K Medical Monitors

## **Pristine Image Quality**

## • MultiPicture Functionality

All Winmate medical monitors feature 4K/2K resolution with multipicture functions for multitasking and simultaneous viewing of up to four (4) video sources (Quad multipicture mode) at 1080p resolution. Picture-in-Picture (PIP), Picture-by-Picture (PBP), and Picture-Over-Picture (POP) modes are available to increase productivity and performance for video display, medical training, and other on-site applications.

Up close or far away, with four times the resolution of HD/1080p displays, you'll see details you didn't know were there before. Surgical teams will appreciate the sharp, detailed images of Winmate Medical Monitors.





## • Utilization of DICOM – Part 14 GSDF Standard

Images directly acquired using Computed Radiography are stored and then displayed using the Digital Imaging and Communication in Medicine (DICOM) Part 14 Grayscale Standard display function to preserve the inherent contrast. Winmate's 4K/2K Medical Displays utilize the DICOM Part 14 GSDF Standard to provide an adequate means which uniformly displays all radiology images.

## • Gamma Correction 14-bit LUT technology

Winmate medical monitors offer 10-bit color with more than 1.07 billion variations. A 14-bit look-up table (LUT) is included and offers 256 of the most appropriate tones. Utilizing the 14-Bit LUT processing enables accurate rendering of surgical images. Gamma ( $\gamma$ ) values of 2.4, 2.2, 2.0 and 1.8, are precisely calibrated at our partner's state-of-the-art manufacturing facility.

To provide users with color accuracy solutions, Winmate is working together with a global leader in visual enhancement software applications and middleware solutions for the display industry.



• 3D LUT and 1D LUT



3D look-up-table technology offers clients the ability to correct non-linear color rendering errors common in most LCD medical displays. With the use of the Winmate 3D LUT integration, these corrections are easily made with maximum color retention. Utilizing both the 1D and 3D LUTs together will achieve accurate color rendering. As a result, it is possible to obtain color measurements from a "target" monitor and "color match" the image onto the Winmate 4K/2K.



#### • Backlight Sensor

A Backlight Sensor continuously monitors and stabilizes the brightness/luminance output. Maintaining a desired output level provides the user with a stable and consistent image. The simulation below shows how the image on a monitor, without a backlight stabilizer, can dim and discolor over time. The Backlight Sensor helps ensure a better image over time for optimum viewing during procedures.



Without Backlight Sensor, image quality deteriorates over time.



With Backlight sensor – image remains consistent longer.

### • Ambient Light Sensor

When our medical display is moved from one lighting condition to another, or if the ambient light suddenly increases or decreases, the ambient light sensor will adjust the display's brightness to a lower or higher level automatically. The ambient light sensor will assistant the Human Visual System (HVS) adapt to changing room light conditions. Thus allowing the user a consistent visual experience when viewing images on our monitors.

### • Optical Bonding – Higher Brightness, Better Clarity, Scratch Resistant

Optical bonding is a process that uses optically clear resin – OCR (i.e. liquid adhesive, optical resin), or optically clear adhesive – OCA (i.e. transparent adhesive film, optical transfer tape), to affix a protective glass overlay or touch screen to the front of an LCD. Filling the air cap between the overlay and the LCD reduces speculation (bouncing light) between the surfaces, thereby increasing contrast, color quality and viewing angle.

This result can be especially important when displays are used under spotlights, surgical lamps, and even bright sunlight.

All Winmate displays are optically bonded for superior visual performance.





## • Wide Viewing Angle

Winmate displays provide a wide 1780 / 1780 viewing angle, which allows the user to see accurate and consistent images from any point of view. The wide screen, wide viewing angle technology also allows two or more people to view and interpret the screen simultaneously from different locations in the OR.



## **Mechanical Design**

• Signature True Flat (Front and Rear) Sides with Slim Design

| 4K UHD  |              |          |
|---------|--------------|----------|
| Full HD |              |          |
| 1920    | 2160         |          |
| 3840    | <u>4K HD</u> | 1.8 inch |

Winmate's 4K-UHD Medical Series includes displays in two (2) different screen sizes:

Using our patent-pending design, both the 27" and 32" models are thinner than the industry standard 26" surgical displays.

Each display features a true flat design, with a rugged aluminum structure, and an anti-corrosiontreated housing that is easy to maintain and clean. The true flat design provides great protection and reduces any gaps where dust or liquids might accumulate. The slim, elegant appearance of Winmate displays is enhanced with edge-to-edge front covers and flexible mounting options.

### IP66 Certified, Sealed Case Design and Fanless

Our sealed case design indicates "fanless", no ventilation slots and cleaning fluids will build up and corrode nor damage the components. IP66 Certified gives the complete protection against contact from dust and powerful jets of water.

# Winmate

## • Capacitive Touch Keys

Winmate's capacitive keys, provide users quick and easy access to the information they need. Multi-touch capabilities have also been added to provide greater control and flexibility, making this medical display a reliable solution in a variety of scenarios where human-interface interaction is involved.



## • Rubber Bumper

One of the principal design elements of the Winmate monitor is the rubber bumper that snuggly wraps around the entire perimeter of the housing. The rubber bumper accessory provides solid edge protection from accidental head injuries and protects the monitor from OR equipment damages. Our rubber bumper can easily be maintained by wiping down quickly in between procedures.



## Connectivity

• True upscale/downscale 4K 60 4:4:4



Winmate's medical display offers higher quality images at 1080p than competing displays, supports up to 4K 60 4:4:4 resolutions with the HDMI 2.0 inputs and optional fiber. In addition, Winmate also equipped the display with 3G-SDI (In and Out). Our medical display in comparison with the cost of other competitors' high-end multimedia 4K UHD displays, offer newer technologies and higher image resolutions. In addition, our modules maintain a high degree of flexibility and quality. A variety of SDI standards have been introduced to support increasing video resolutions. A converter box can be included which takes Composite, VGA, and DVI (HDMI) video and then converts it to 3G-SDI (1080p).



## • IR Remote Control

An infrared remote control offers the ability to manage/ adjust settings on our medical displays remotely. In sterilized environments, accessing the menu setting, or other options through physically touching the control buttons is not an option.

Using a remote control increases productivity and prevents cross contamination.



## • Built-in Speaker

Bringing sound to the OR in a safe and un obtrusive manner. Often time audio is requested for a variety of reasons. A monitor with built in stereo speakers and common 3.5mm input and output jacks, will alleviate the issue for an additional speaker system. Ideal for cath labs, general OR, training rooms, and other areas. Flushmount built in speakers allow for an inexpensive and convenient way to broadcast audio already carried by HDMI, Fiber cables, if and when required.



## Certification

• Manufacturing Certificate

Winmate achieved ISO 13485:2003 and EN ISO 13485:2012 certification for its' design, development, production, installation, and servicing of medical devices. What does this mean for you? Winmate's certification confirms any portable panel PCs and mobile tablets we develop for use in the medical industry are safe and meet all regulatory design requirements.

This achievement will also enable Winmate to expand its medical-related product line, and create new opportunities for our original design manufacturer (ODM), original equipment manufacturer (OEM), and rebranding partners.



ISO 13485 is a quality management system standard specifically for the medical devices industry. It was written to support medical device manufacturers in designing quality management system that establish and maintain the effectiveness of their processes. It ensures consistency from design to delivery of medical devices, and confirms they are safe for use for their intended purpose.



## • Product Certificate

IEC 60601 is a standard published by the International Electro technical Commission. The standard consists of four parts, those being the base standard 60601-1 (general requirements for electrical medical equipment), collateral standards numbered 60601-1-X (example: IEC 60601-1-2, is a standard for Electromagnetic Disturbance – Requirements and tests), particular standards numbered 60601-2-X (example: IEC 60601-2-2, is the standard for high-frequency surgical devices), and performance standards in the 60601-3-X range. Winmate, has an entire line of IEC 60601-1 certified Point of Care, Tablet PC, and Display. Winmate offers medical certified solutions for maintaining safe operations and collecting detailed, sensitive data in Operating Room and Hospital environment.

## Warranty and Service Center

## • Warranty

Winmate products are covered by a one (1) year comprehensive warranty. An extended warranty provides the convenience and peace of mind that the monitor is covered for an extended period of time.

Should a problem arise, it will be solved quickly and effectively at any time during the additional 2 years. (3 year total)



## • Service Center

We understand that prompt and responsive support is a must. For this reason, we have service centers in California, Georgia, Florida, Canada, Germany, China and Taiwan.

Ensuring that our customers receive responsive, reliable, and quick customer support on our entire product line.



## Medical Display - 4K UHD

## 27"~32"

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 advance technology to keep it running smoothly. The M270TF and M320TF monitor offers a UHD 4K (3840 x 2160) resolution and a 3D LUT for color accuracy, this advanced technology helps minimize errors and improve hospital operational efficiencies.

#### Features

- 27~32" Display with UHD 4K (3840 x 2160) native resolution for video display and other on-site applications
- Projected Capacitive USB Multi-touch Screen
- 3D Look Up Table (LUT) providing rich and deep depth perception
- Fanless and Ventless design, Easy-to-Clean
- Compatible with existing imaging systems



INMATE

M270TF

| Size                                       | 27"  | 32"   |  |
|--|--|---|--|
| Model Name                                 | M270TF   | M320TF  |  |
| Screen Technology                          | LED Backlight Technology, TFT Active-matrix, Widescreen, IPS Technology  |   |  |
| Active Area                                | 596.16"(H) x 335.34"(V) mm 708.48"(H) x 398.52"(V) mm  |   |  |
| Native Resolution                          | 3840 x 2160 (UHD 4K)   |   |  |
| Pixel Pitch                                | 155 (H) x 155(V)mm   | 184.5 (H) x 184.5(V)mm  |  |
| Aspect Ratio                               | 16:9   |   |  |
| Response Time                              | 12ms (Gray to Gray)  |   |  |
| Light Intensity                            | 300 cd/m <sup>2</sup> (typ),<br>optional high brightness up to 700 cd/m2 (typ)   | 350 cd/m <sup>2</sup> (typ),<br>optional high brightness up to 700 cd/m2 (typ)      |  |
| Contrast Ratio                             | 1000:1 (typ)   |   |  |
| View Angle                                 | 89/89/89   |   |  |
| Max Colors                                 | 1.07B  |   |  |
| Synchronization Signal<br>Auto-detect      | Digital Separate Sync., Composite Sync.,Sync. On Green   |   |  |
| Color Profiles                             | 3D LUT profile selection + 6 general user color schemes  |   |  |
| Optimal Resolution and Hz                  | 3840 x 2160 @ 60 Hz 4:4:4  |   |  |
| Detectable Resolutions<br>(Partial List)   | 640 x 480, 720 x 400, 800 x 600, 1024 x 768, 1280 x 1024, 1600 x 1200, 1920 x 1080, 1920 x 1200, 2560 x 1440, 3840 x 2160, 4096 x 2160   |   |  |
| Product Features                           | Backlight sensor, Ambient light sensor, IR Control   |   |  |
| Power Specifications                       | 24V DC in 150W, with external<br>110-240V AC to DC Adapter   |   |  |
| User Controls and Activity                 | Capacitive OSD : Power On/Off, On Screen Display Menu, Brightne  | ss Control (-/+)  |  |
| Input Signal                               | • 3G SDI     • VGA     • Audio In     • HDMI 2.0     • DVI     • DP 1.4     • HDMI 1.4   |   |  |
| Output Signal                              | <ul> <li>DP (Multi-Stream Transport)</li> <li>Audio Out</li> <li>5V out</li> <li>3G SDI (Loop Through)</li> </ul>  |   |  |
| Product Dimensions                         | 643.17 x 408.06 x 48 mm (25.3 x 16.1 x 1.8 in)   | 777.58 x 477.62 x 48 mm (30.6 x 18.8 x 1.8 in)                                      |  |
| Mounting                                   | VESA mounting 100 x 100mm<br>VESA mounting 200 x 100mm   | VESA mounting 100 x 100mm<br>VESA mounting 200 x 100mm<br>VESA mounting 300 x 100mm |  |
| Product Weight                             | 8.8 Kg (19.4 lbs)  | 13 Kg (28.66 lbs)   |  |
| Factory Options                            | Rubber Bumper     Projected Capacitive Multitouch screen (USB)   |   |  |
| Operating Temperature                      | 0 deg.C to 35 deg.C, Humidity up to 95%  |   |  |
| Storage Temperature                        | -20 deg.C to 60 deg.C, Humidity up to 95%  |   |  |
| IP Rating                                  | Protection: front IP65 - rear IP22   |   |  |
| Type Approval,<br>Testing and Certificates | <ul> <li>IEC 60601-1:2005 + A1:2015 (Ed. 3.1)</li> <li>IEC 60601-1-6:2010 + A1:2013 (Ed. 3.1)</li> <li>IEC 62366:2007 + A1:2014 (Ed. 1.1)</li> <li>ANSI/AAMI ES60601-1:2005 / A1:2012 and C1:2009/(R)2012 and A2:2010/(R)2012</li> <li>CAN/CSA-C22.2 No.60601-1:14</li> <li>ENS60601-1-2</li> <li>ENS5032/ENS5024, FCC part 15B</li> <li>ENS60601-0</li> </ul> |   |  |

## Winmate

## Rugged Handheld PDA





| Panel Size               | 4.3"   | 5"   | 7"   |
|--------------------------|--|--|--|
| SpecTitle                | E430RM4L   | E500RM8  | M700DM8  |
| Panel Size               |  |  |  |
| Panel Display Resolution | 480 x 800  | 1280 x 720   | 1280 x 720   |
| Panel Brightness         | 400 (typ.)   | 500 (typ.)   | 650 (typ.)   |
| Touch SensorType         | Projective Capactive Multi-touch                                   | Projective Capacitive Multi-touch  | Projected Capacitive Touch   |
| Panel Contrast Ratio     | 800:1 (typ.)   | 800:1 (typ.)   | 500:1 (typ.)   |
| Sensors                  | Light Sensor, Proximity Sensor,                                    | Light Sensor, Proximity Sensor,  | G-Sensor, Light Sensor   |
| System Specification     | G-sensor, Digital Compass  | G-sensor, Digital Compass  |  |
| Processor                | ABM Cortex™-A53 Quad Core 1 3GHz                                   | ARMR Cortex™-A53 Octa-core 1 3GHz  | ABM <sup>®</sup> Cortex™ -A53 Octa-core 1 3Ghz                     |
| Memory                   | 1GB SDRAM  | 2GB SDRAM  | 2GB Mobile DDR2  |
| Storage                  | 8GB eMMC (Optional to 32GB, MOQ:1K)                                | 16GB eMMC  | 16GB eMMC  |
| 05                       | Android 5 1  | Android 5 1  | Android 5 1  |
| Wireless Communication   |  |  | 7.1101010.5.1  |
| WLAN                     | Support 802.11 a/b/g/n   | 802.11 a/b/g/n   | Support 802.11 a/b/g/n   |
| Bluetooth                | Bluetooth 4.0  | Bluetooth 4.0  | Bluetooth 4.0, Support BLE   |
|                          |  | CONTONE FOR 12/12/15/16  | mode + wide-band speech  |
| WWAN                     | Built-in 3G/4G LTE (GSM / GPRS /<br>EDGE / WCDMA / HSDPA / HSUPA)  | GSW/GPKS/EDGE, 02/03/05/06<br>WCDMA/HSDAP/HSPUA, b1/b2/b4/b5/b8<br>FDD-LTE / TDD-LTE, b1/b3/b4/<br>b7/b8/b38/b30/b40/b41 | GSM/GPRS/EDGE, WCDMA/HSDAP/<br>HSPUA, FDD-LTE, TDD-LTE             |
| GPS                      | Built-in GPS module  | GPS / AGPS / GLONASS   | Built-in GPS module, Support Glonass / Beidou                      |
| I/O Connectors           |  |  |  |
|                          | 1 x SIM card slot,   | 2 x SIM card slot,   | 1 x Micro USB OTG,   |
| External I/O             | 1 x Micro SD card slot,  | 1 x Micro SD card slot,  | 1 x Headset jack (Mic+Earphone),                                   |
| Externally o             | 1 x Micro USB,   | 1 x Micro USB,   | 1 x 2.5Ø 5V DC Power Input, 1 x SIM Slot,                          |
|                          | 1 x Pogo Pin For charging  | 1x Power Jack, 1 x Docking Connector   | 2 x Microphones, 1 x Micro SD Card Slot                            |
|                          | 1 x Function button  | 1 x Volume - +,  | 2 x Volume Key   |
| Control Button           | 4 x Capactive buttons:Home/  | 1 x Power button, 2 x Function button,   | 1 x Home, 1 x Menu,  |
|                          | Menu/ ESC/ Search functions  | 4 x Front Key  | 1 x Return, 1 x Search   |
| LED indicator            | 1 x LED indicator  | 1 x LED indicator  | Power / Battery  |
| Audio                    | 1 x Built-in Mic, 1 x Earphone,                                    | 2 x Built-in Mic, 1 x Earphone,  | 1 x 1.2W Speaker   |
| Mechanical and Environm  | ent  |  |  |
| Dimensions (W x L x H)   | 132.57 x 81.87 x 27.4 mm   | 85.9 x 163.2 x 22.5 mm   | 212.4mm x 132.8mm x 19mm   |
| Net Weight               | 260g   | 315grams   | 550g   |
| Operating Temperature    | -20 deg.C to 60 deg.C (AC Mode)                                    | -20 deg.C to 60 deg.C (AC Mode)  | -20°C to 60°C (AC Mode),   |
| Operating Humidity       | $10\% \approx 95\%$ PH (non-condensing)                            | -10  deg.c to 50 deg.c (Battery Mode)  | 5%-95% PH (non-condensing)   |
| IP Proof                 | IP65   | IP65   | IP65   |
| Certifications           |  |  |  |
| Shock                    | MIL-STD-810G Method 516 6 Procedure L                              | MIL-STD-810G Method 516 6 Procedure I  | MIL-STD-810G M516 5  |
| Vibration                | MIL-STD-810G Method 514.6 Procedure I                              | MIL-STD-810G Method 514.6 Procedure I  | MIL-STD-810G M510.5  |
| VISIALION                | MIL-STD-810G Method 516 6  | MIL-STD-810G Method 516 6  | WIE 51D-0100 WI514.5   |
| Drop                     | 4 ft, Free to concrete   | 4 ft, Free to concrete   | MIL-STD-810G M516.5 4 ft, Free to concrete                         |
| Power Management         |  |  |  |
| Adapter                  | 5V/1A, USB Adapter   | 5V 2A Adapter  | 100-240V, 50-60Hz, 5VDC  |
| Battery                  | 3.7V 3900mAh Li-poly removable battery                             | 3.7V 3900mAh Li-ion removable battery  | Li-Polymer Battery 5300 mAh  |
| Battery Operating Time   | 20 Hrs **  | 20 hrs **  | 20 hrs **  |
| Data Capture<br>Barcode  | Motorola SE4500 1D/2D Barcode Beader                               | 1D/2D Barcode Reader (Ontional)  | Motorola SE4500 1D/2D Barcode Beader                               |
| barcoue                  | Wotorola 324300 10/20 Barcode Reader                               | Default NEC (Read / Write  |  |
| NFC                      | NFC (Read / Write, Peer to Peer mode)                              | Peer to Peer mode)   | NFC ( Read / Write, Peer to Peer mode )                            |
| Camera                   | Rear: 8 Mega-Pixel Camera with<br>LED auxiliary light (Auto Focus) | auxiliary light (Auto Focus)   | Rear: 5 Mega-Pixel Camera with LED auxiliary<br>light (Auto Focus) |
|                          | Front: 2 Mega-Pixel Camera   | Front: 2 MP Camera (Either one with Barcode Beader)  | Front: 2 Mega-Pixel Camera   |
| Smart Card Poador        |  | ISO 7816 part 1.2.3 (Optional)   |  |
| sinari caru Neauer       | RE Transmit Frequency 13 56MHz                                     |  |  |
| PEID                     | • ISO 14443-A (R/W)  |  | RF Transmit Frequency 13.56MHz, ISO                                |
| NFID                     | • ISO 15693 (R/W))   |  | Mifare One(S50) Mifare One(S70)                                    |
|                          | Mitare One (S50), Mifare One (S70)                                 |  |  |
| Fingerprinter            |  | Fingerprint Reader (Optional)  |  |

\*\*Note: Measured at dimming LCD brightness. Varies depending on the usage conditions, or when an external device is attached.

# Winmate

## Rugged Tablet PC





| Panel Size                        | 8.0   | 10.1"   |
|-----------------------------------|---|---|
| Spec Title                        | M800BW  | M101H   |
| Panel Size                        |   |   |
| Panel Display Resolution          | 1280 x 800  | 1920 x 1200   |
| Panel Brightness                  | 600 nits  | 700 (typ.)  |
| - 10 -                            | Multi-Touch Projective Capacitive with Glove/   |   |
| louch SensorType                  | Rain/ Stylus modes (support active stylus)  | Multi-Iouch Projective Capactive  |
| Panel_Contrast Ratio              | 800:1   | 750:1   |
| Sensors                           | Light sensor / G sensor / Gyro / E-compass  | Light Sensor / G- Sensor / Gyroscope / E-Compass  |
| Viewing angle                     | 85/85/85  | 89 / 89 / 89 / 89   |
| System Specification              |   |   |
| Processor                         | Intel <sup>®</sup> PentiumR Processor N3/10 1.6GHZ  | Intel® 5th Generation Core® 15-52000 2.2GHz   |
| Mamon                             |   |   |
| Starrage                          | 408 SODIWIW DDK5L-1000 (up to 808)  |   |
| Storage<br>Wireless Communication | 64GB M.2 MLC SSD (up to 512GB)  | 64GB MSATA MLC SSD (up to 256GB)  |
| wheless communication             | Intel® Dual Band Wireless-AC 3160 802 11 a/   |   |
| WLAN+Bluetooth                    | b/g/n/ac + Bluetooth 4.0 Dual Mode (Class<br>1 + Low Energy) combo module   | 802.11 a/b/g/n + Bluetooth 4.0 + Class I  |
| WWAN                              | 4G (LTE, HSPA+, GSM/GPRS/EDGE, EV-DO Rev A,<br>1 x RTT), 3G (HSPA+, GSM / GPRS / EDGE)  | Optional 4G (LTE, HSPA+, GSM / GPRS / EDGE, EV-DO Rev A,<br>1 x RTT) or optional 3G (HSPA+, GSM / GPRS / EDGE)  |
| GPS                               | u-Blox NEO-M8N (Support GPS + Glonass)  | u-Blox Neo-6Q   |
| I/O Connectors                    |   |   |
| Audio                             | 2 x Built-in Digital Mic,<br>1 x Speaker  | 1 x Built-in Mic,<br>2 x 1W Speaker   |
| External I/O                      | 2 x USB 3.0<br>1 x Micro HDMI<br>Service Window for WWAN Module<br>Micro SD, Micro SIM: Located in the battery compartment<br>1 x M12 Connector - USB signal & power (Optional) | 1 x Micro HDMI,<br>1 x 30-pin Combo Conn (Giga-LAN or RS232),<br>1 x USB3.0,<br>1 x Audio Combo Conn. (Mic in or Line Out),<br>1 x Power Jack,<br>1 x Micro SD Slot |
| Control Button                    | 1 x Power,<br>2 x Programmable Function Keys  | 1 x Power Button,<br>1 x Menu/Home key,<br>2 x Programmable Function Keys,<br>1 x Volume up,<br>1 x Volume down   |
| LED indicator                     | 4 x LED indicators (Power, Battery status, SSD status, RF status)   | Power, Battery, HDD Access, RF  |
| Mechanical and Environm           | ent   |   |
| Dimensions (W x L x H)            | 228.8 x 165.8 x 27 mm   | 2/1.8 x 19/.2 x 21 mm   |
| Net Weight (kg)                   | 1.1 Kg  | 1.25 kg (2.7 lbs) with standard battery,<br>1.45 kg (3.2 lbs) with optional high capacity battery   |
| Operating Temperature             | -20°C to 60°C (AC mode), -10°C to 50°C (Battery mode)   | -20°C to 60°C (AC Mode), -10°C to 50°C ( Battery Mode )   |
| Operating Humidity                | 10% to 90% RH, non-condensing   | 10% ~ 90% (non-condensing)  |
| IP Proof                          | IP65  | IP65  |
| Certifications                    |   |   |
| Shock                             | MIL-STD-810G Method 516.6 Procedure I   | MIL-STD-810G Method 516.6 Procedure I   |
| Dron                              | MIL-STD-810G Method 516.6 A ft to concrete  | MIL-STD-810G Method 516.6.4 ft to concrete*   |
| Power Management                  |   |   |
| Power Input                       | 12~19V DC   | 12~19V DC   |
| Battery                           | 7.6V typ. 5200mAh Li-ion Battery (2S2P)   | <ul> <li>7.4V, typ. 5300 mAh, min. 5140 mAh Li-Polymer Battery (251P)</li> <li>7.4V, typ. 10600 mAh, min. 10280 mAh Li-Polymer Battery (252P, optional)</li> </ul>  |
| OS                                | Windows 10 IoT Enterprise, Windows<br>Embedded 8.1 Industry Pro   | Windows 10 IoT Enterprise, Windows Embedded 8.1 Industry Pro,<br>Windows 7 Pro for Embedded Systems   |
| Camera                            | Front: 2MP. Rear: 8MP   | Front: 2MP. Rear: 5MP   |
| Data Capture                      | Finger print scanner,<br>RFID reader,<br>1D/ 2D barcode reader,<br>Smart Card Reader  | 1D/ 2D barcode reader   |





#### Winmate Inc.

#### Winmate Taiwan - HQ Winmate Inc.

No.111, Shing-De Rd., San-Chung District, New Taipei City 24158, Taiwan. Tel : +886-2-8511-0288 Email : sales@winmate.com.tw http://www.winmate.com/

#### Winmate USA (Main Office) WinMate Communication US. Inc.

2640 Mathews St. Smyrna, GA 30080 Tel 1 : (888) 985-3398 Tel 2 : (770) 274-3381 Email : NASales@winmate.com.tw http://www.winmate-rugged.com/

#### Winmate USA (West Coast) Tomlinson Technologies

440 South Cataract Ave. #K San Dimas, CA 91773 Tel : 626-327-2251 Email : tomlinson@winmate.com.tw http://www.winmate-rugged.com/

#### Winmate Canada TTX Canada Inc.

150 Werlich Drive Units 5&6 Cambridge, Ontario N1T 1N6 Tel : 519-621-1881 Email : ttxsales@ttx.ca http://www.ttx.ca/

Winmate reserves the right to make changes in specifications and features shown herein, or discontinue the product at any time without notice or obligation.