

# EME CarePanel User's Manual



excel  
medical  
electronics

Excel Medical Electronics, LLC.  
801 Maplewood Dr., Suite 26  
Jupiter, FL 33458  
Phone: (561) 743-4380  
Fax: (561) 748-8889  
[www.excel-medical.com](http://www.excel-medical.com)







*Trademarked names appear throughout this document. Rather than list the names and entities that own the trademarks or insert a trademark symbol with each mention of the trademarked name, the publisher states that it is using the names only for editorial purposes and to the benefit of the trademark owner with no intention of improperly using the trademark.*

*CarePanel is a Trademark of Excel Medical Electronics, LLC.*

## Table of Contents

Symbol Descriptions .....	3
Terminology .....	3
Theory of Operation .....	4
Overview .....	4
Architecture .....	4
Indications for Use .....	4
1 CarePanel Device Overview .....	5
2 Accessories .....	5
3 Powering On the CarePanel .....	6
On Battery .....	6
On AC Power .....	6
4 Screen Indicators .....	6
5 Mobile Vitals Capture Software .....	7
Sign on .....	7
Patient Selection .....	7
Vital Acquisition .....	7
Sending Vitals .....	8
6 Panel Maintenance .....	9
Overview of Maintenance .....	9
Preventative Maintenance .....	9
Periodic Maintenance .....	9
7 Power Requirements .....	10
8 Battery Maintenance .....	10
Terminology .....	10
First Time Usage .....	10
Battery Lifespan .....	10
Long Term Storage .....	10
Battery / Unit Disposal .....	10
9 Periodic Cleaning .....	11
10 Specifications .....	12
11 Safety and Regulatory Compliance .....	13
11 More Information .....	13

## Symbol Descriptions

	Manufacturer
	Specifies serial number
	<u>DISPOSAL</u> : Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.
	Refer to instruction manual / booklet
	Battery indicator
	Wi-Fi indicator

## Terminology

**NOTE**: Intended to highlight unusual points as an aid to the operator.

**CAUTION**: Directions that, if not followed, could cause damage to the Equipment.

**WARNING**: Directions that, if not followed, could cause fatal or serious injury to an operator, patient or any other person.

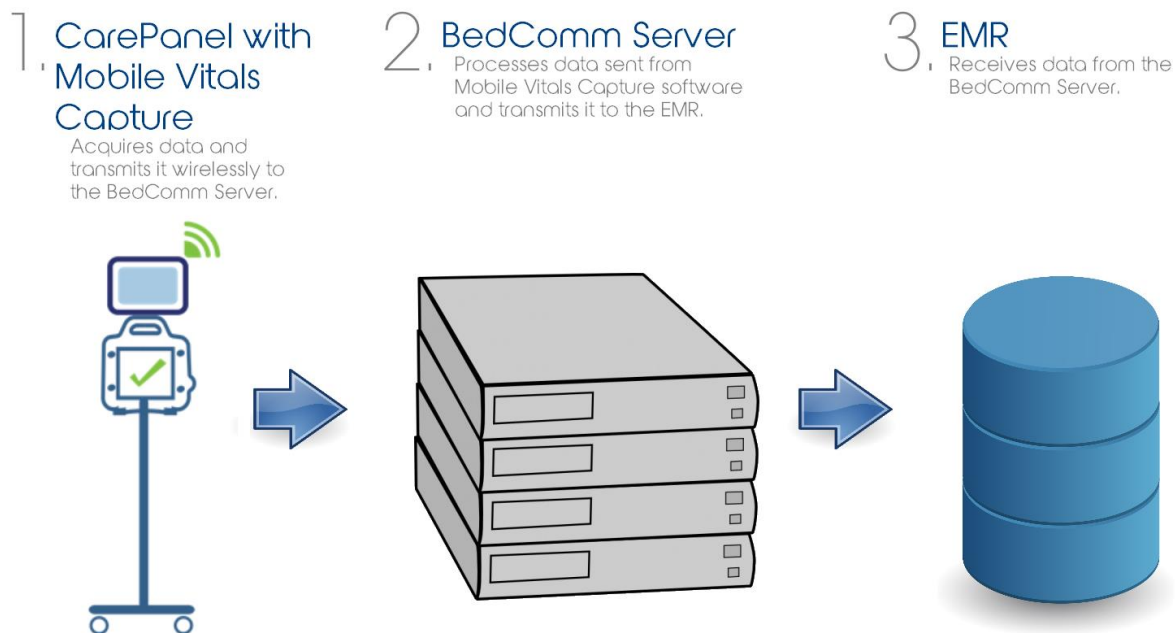
## Theory of Operation

### Overview

The Excel Medical Electronics CarePanel (CarePanel) is a multi-use computer tablet. The CarePanel is a mobile computer with display, circuitry, and battery in a single unit. The CarePanel is equipped with a touchscreen thus finger gestures can substitute for the use of a computer mouse and keyboard. The CarePanel also includes physical buttons to control basic features such as speaker volume and power, a camera, and ports for network and device communications and to charge the battery.

### Architecture

The CarePanel can be utilized as a standard computer tablet with no additional components. The CarePanel can also host software applications and as such be utilized in conjunction with other platforms. The design of the CarePanel allows it to very effectively be utilized with EME's BedComm platform that consists of server software and Mobile Vitals Capture software installed on the CarePanel. The CarePanel is manufactured for Excel Medical Electronics to serially connect to a vital signs monitor and the Mobile Vitals Capture software transmits data wirelessly from the tablet to the BedComm server where it can then be sent to an Electronic Medical Record (EMR) or other data repository. A barcode scanner can be connected to the CarePanel and utilized as part of the BedComm platform for more efficient data entry.



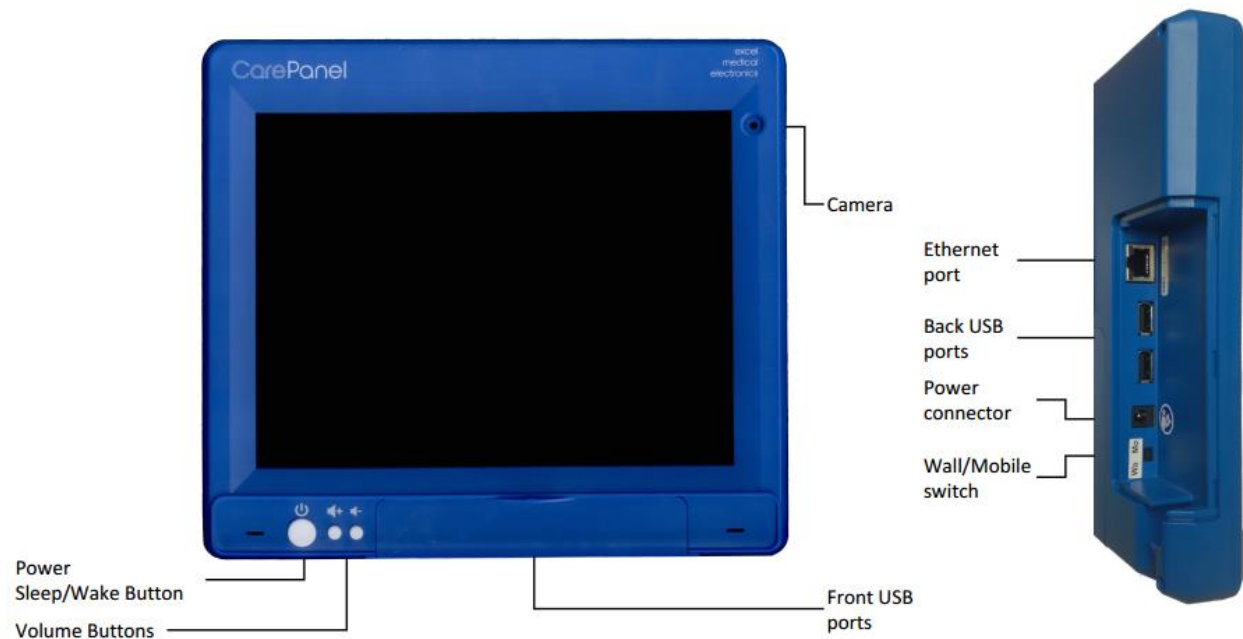
## Indications for Use

The CarePanel is indicated for use in data collection, display and information management either independently or through networking with other devices. The CarePanel is not intended for patient monitoring purposes nor is it intended to control any of the devices to which it is connected.

**NOTE:** Clinical users need to be trained separately on the operation of any medical device connected to the CarePanel according to the training requirements of those medical devices.



**WARNING:** The CarePanel or any associated accessories should not be modified in any way or used other than as indicated in this manual. Any modification to the hardware can prevent proper functioning and cause damage to the connected devices.

## 1 CarePanel Device Overview



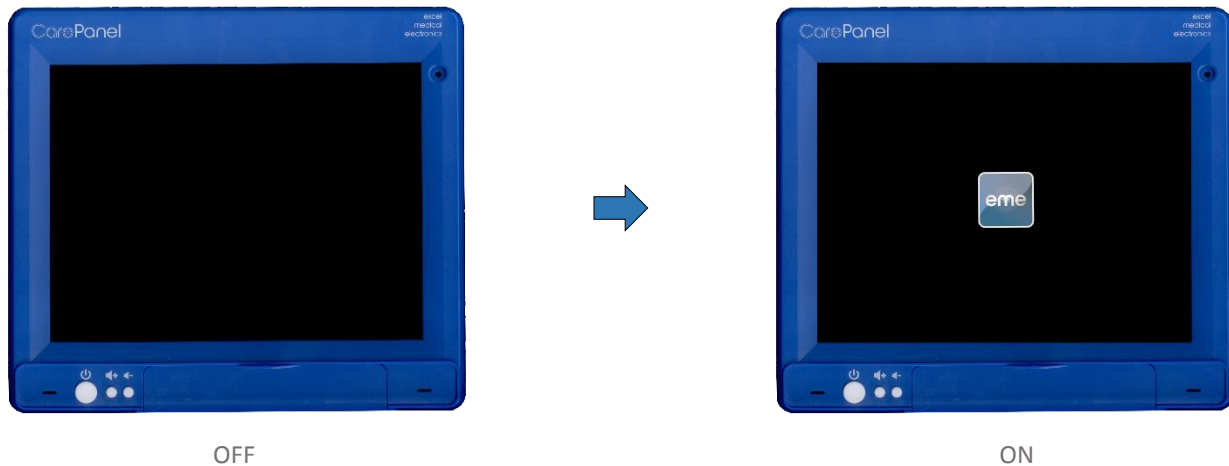
## 2 Accessories

The following accessories can be used in conjunction with the CarePanel. If any of these accessories need maintenance please contact a service technician.

	<p><b>Barcode Scanner.</b></p> <p>Used to scan barcodes. If a barcode scanner is utilized the back USB ports are suggested. Please refer to the Installation Manual for instruction on connecting to the CarePanel.</p>
	<p><b>Power Cable and Power Block.</b></p> <p>Used to charge the CarePanel from a standard wall outlet. The power connector is located in the rear of the CarePanel. Please refer to the Installation Manual for instruction on connecting to the CarePanel.</p>

### 3 Powering On the CarePanel

To power on the CarePanel, first determine whether it will run on a charged battery (not plugged in to the wall) or it is plugged into the wall and will utilize AC power.



#### On Battery

Press and hold down the power button for approximately 5 seconds, the blue EME logo (pictured above) will appear confirming it is powered on.

#### On AC Power

Tap the power button one time and wait for the battery indicator to appear. When the battery indicator appears, press and hold down the power button for approximately 5 seconds, the blue EME logo (pictured above) will appear confirming it is powered on.

### 4 Screen Indicators

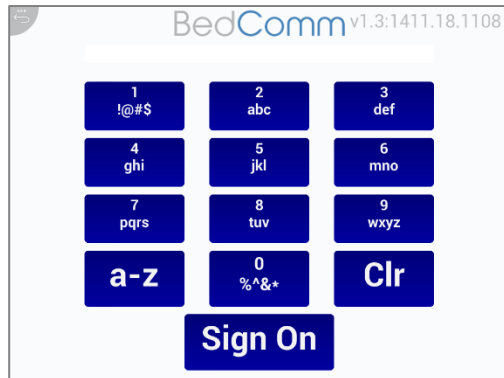
The CarePanel battery and Wi-Fi indicators are displayed on the bottom right corner of the screen. Tapping either of these indicators will pop up the battery life percentage (0 – 100% with 100% indicating the fullest charge), and Wi-Fi connectivity (0-4 bars with 0 being the lowest and 4 being the highest quality of connection).



## 5 Mobile Vitals Capture Software

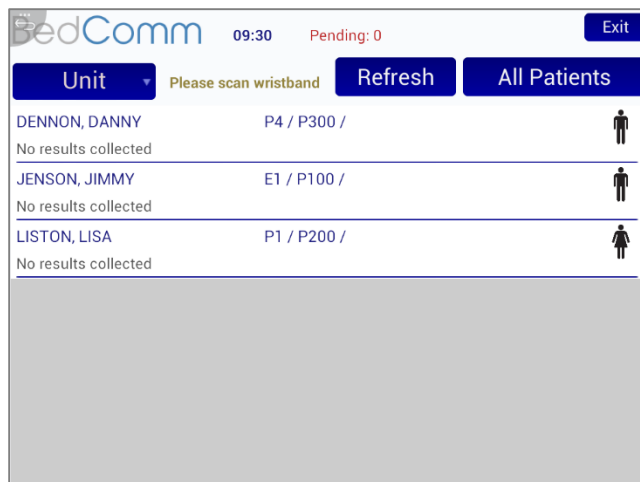
### Sign on

Using the on screen pin pad type in your assigned PIN and tap *Sign On* to sign on to Mobile Vitals.



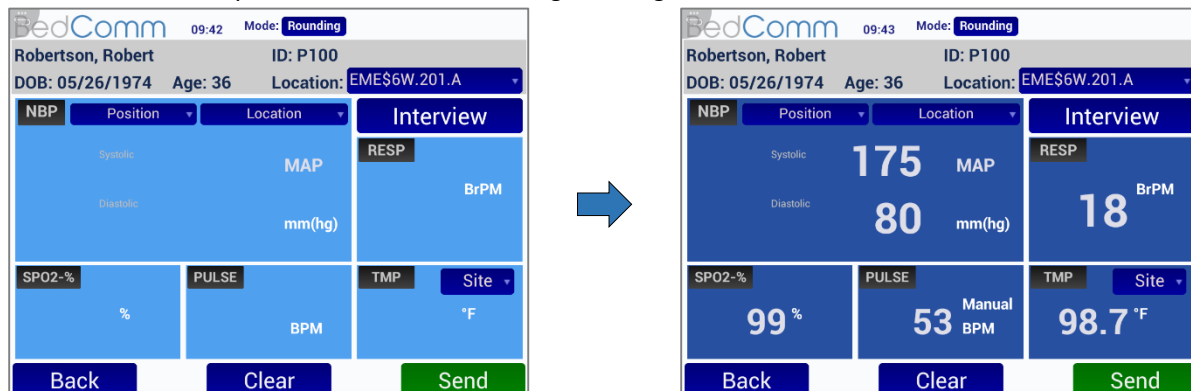
### Patient Selection

To select a patient, use either the provided barcode scanner to scan the patient's barcode on their wristband, or tap their name on the screen.



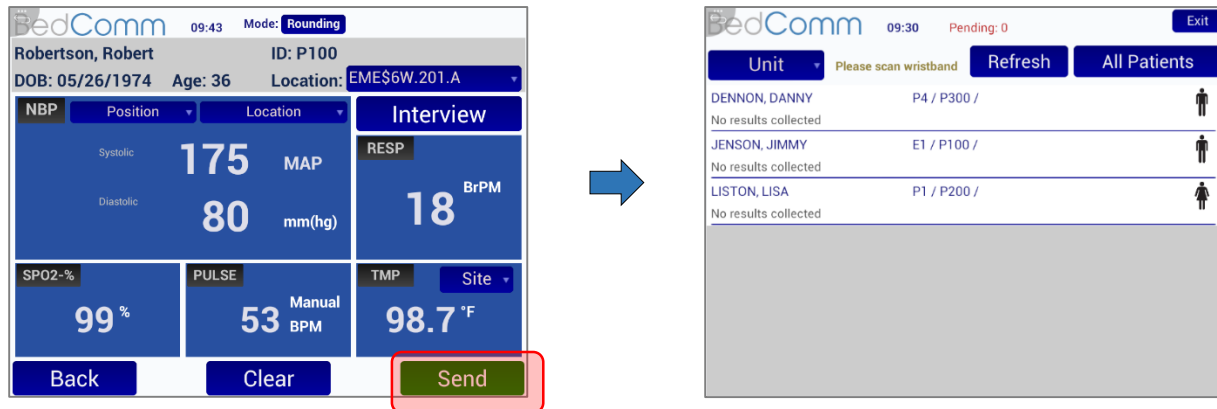
### Vital Acquisition

Following normal clinical guidelines, take the patient's vital signs using the vital signs monitor. As vitals are collected, or manually entered the boxes will change from light blue to dark blue.

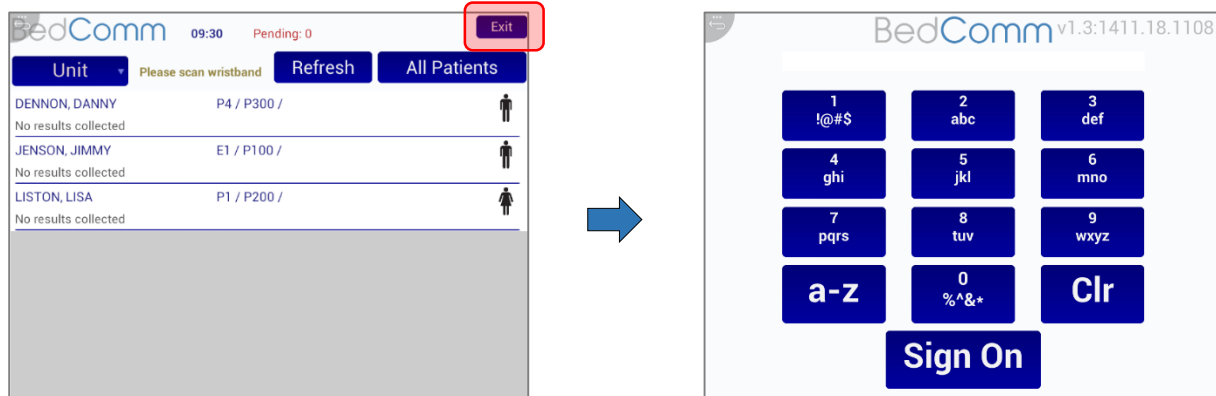


## Sending Vitals

Once each required field is completed and verified, tap the green *Send* button on the bottom right side of the screen. The patient's vitals will be sent and you will be returned to the patient selection screen.



To log out, tap the exit button at the top right hand side of the screen.





## 6 Panel Maintenance

### Overview of Maintenance

The CarePanel is a flexible device that can be utilized in various environments. It should be handled with care at all times. This manual is designed to direct usage of the CarePanel in a safe and effective manner.

**CAUTION:** Do not operate the CarePanel without completely reading and understanding these instructions. Please pay particular attention to all cautions and warnings.

### Preventative Maintenance

These measures can extend the life of the CarePanel:

- Do not store the CarePanel in direct sunlight for long periods.
- Avoid temperatures below 0°C / 32°F or above 45°C / 113°F.
- Avoid direct exposure to water, sand, dust and other environmental hazards.
- Keep the CarePanel away from food and beverages.
- Do not try to dry the CarePanel in a microwave oven should it get wet as this may cause fire or explosion.
- Keep the covers closed on the connectors, doors, and slots when they are not in use to prevent dust or dirt entry.
- Prevent heavy and/or sharp objects from falling onto or being put onto the display.
- Do not drop, knock, or shake the mobile device. Rough handling can break internal circuit boards or break the plastic shell of the CarePanel.
- Be careful to keep power cables neatly bundled away when charging the CarePanel to prevent tripping.
- Do not paint the mobile device. Paint can clog the device's moving parts or ventilation openings and prevent proper operation.

### Periodic Maintenance

Each year, inspect the power cable, power block, and batteries for any kind of damage, overheating or corrosion. Replace as needed.

## 7 Power Requirements

The CarePanel is designed to be powered from the provided IEC 60601-1 compliant external AC power supply. The delivered power supply and hospital grade power cord are the only items that should be used to provide power to the CarePanel.

Model: Mean Well Enterprises Co. GSM40A05

Input: 100-240VAC 50/60Hz, 1.0-0.5A

Output: 5V DC 5.0A, 25 W Max.

Always use the hospital grade, AC power cable delivered with the product to connect the CarePanel to an AC power source.

**WARNING:**

- Do not connect the CarePanel to an AC outlet that is controlled using a switch or dimmer.
- Do not remove the grounding conductor from the power plug.
- Do not use extension cords or adapters.
- The power cable, supply, and plug must be intact and undamaged.
- To avoid the risk of electrical shock, the equipment must only be connected to supply mains with protective earth.
- Cords and cables can be serious tripping hazards. Route the cords and cables in your work area so that they are not a tripping hazard to you or anyone else.
- Check all power cords periodically and replace any frayed or damaged cords.
- Make sure cords are not being crushed, stretched or kinked because all these problems can create shock and fire hazards.

## 8 Battery Maintenance

### Terminology

- Battery life - the time a CarePanel will run before it must be recharged.
- Battery lifespan - the total number of cycles the battery will last before it must be replaced.

### First Time Usage

Fully charge the CarePanel when you plug it in for the first time. Full charge takes at minimum four (4) hours.

### Battery Lifespan

The removable battery of the CarePanel is designed to retain up to 80% of its original capacity after 300 charging cycles. You may choose to replace your battery when it no longer holds sufficient charge.

### Long Term Storage

If the CarePanel will not be used for an extended period of time, the battery should be fully charged and removed from the unit. Always store the battery separate from the unit.

### Battery / Unit Disposal

If desired, to dispose of the unit or a battery, return the unit or battery back to Excel Medical Electronics for proper disposal.



**DISPOSAL:** Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.

Recycle or dispose of the lithium battery in accordance with all federal, state and local laws. To avoid fire and explosion hazard, do not burn or incinerate the battery.

## 9 Periodic Cleaning

When cleaning or disinfecting the Care Panel, it is important to ensure that the Care Panel is powered off. Clean and disinfect the Care Panel periodically by wiping the outer case with a lint-free cloth, lightly moistened with warm water and a mild, non-abrasive cleaning solution made of either:

- 70% isopropyl alcohol
- 10% bleach solution
- Sani-Cloth® - dimethyl ethyl benzyl ammonium chlorides 0.125%, dimethyl benzyl ammonium chlorides 0.125%, Isopropyl alcohol 14.850%
- CaviCide™- Isopropanol 17.2%; Diisobutylphenoxyethyl dimethyl benzyl ammonium chloride 0.28%

The Care Panel touch screen can be wiped down (e.g. to remove fingerprints, or fluid splatter) during normal operation while powered on using standard computer screen solution.

### **CAUTION:**

- Do not spill liquids on or around the unit.
- Do not use another solution than the ones mentioned above.
- Do not touch, press or rub the display panel with abrasive cleaning compounds, instruments, brushes or rough-surface materials.
- Do not expose the power cord or power block to liquid.
- The CarePanel is not water tight, therefore do not spray cleaning liquid or foam onto the device.
- Never submerge or soak the Care Panel for cleaning.
- Do not use solvents to clean the Care Panel.
- To avoid damaging the CarePanel, do not clean, disinfect, or sterilize any part of the system by autoclaving or with the use of ethylene oxide gas.
- Never spray or squirt any type of liquid onto the CarePanel; if a spray is needed, spray the liquid onto a cloth and then use that cloth to rub down the component.
- The best strategy to avoid damaging the CarePanel is to avoid contamination to minimize the need for disinfectants.

### **WARNING:**

- Do not expose the power block and the power cable to liquids.
- The device is not suitable for use in the presence of flammable anesthetic mixtures with air or with oxygen or nitrous oxide.
- The device requires no calibration.
- The device is not repairable and contains no user serviceable parts.
- The manufacturer does not require such preventive inspections by other persons.
- Do not position the equipment so that it is difficult to operate the disconnection device.

## 10 Specifications

BedComm CarePanel Specifications	
<b>Dimensions</b>	Height: 8.5, Width: 9.5, Depth: 1.25
<b>Weight</b>	2.2 LB (1kg)
<b>Mounting options</b>	VESA 75 standard mounting bracket
<b>Electrical ratings</b>	5v, 5.0A, 25w
<b>External power supply</b>	100-240 V AC, 1.22-0.68 A, 47-63 Hz, 60W max
<b>Battery</b>	Li-Ion Battery Pack 4000mAh
<b>Protection against ingress of water</b>	lpx 1
<b>Display size</b>	9.7" wide active TFT capacitive touch screen, 1024x768
<b>Display Brightness</b>	250 cd/m <sup>2</sup>
<b>Contrast</b>	400:1
<b>Memory</b>	1GB
<b>Network connectivity</b>	100 base-T LAN WLAN 802.11 b/g/n (2.4 Ghz)
<b>WLANsecurity</b>	WPA, WPA2, WEP
<b>Cooling</b>	Passive cooling system (fanless)
<b>Operating environment</b>	0°C to +50°C (+32°F to +122°F), 5% to 95% RH non-condensing
<b>Transport and storage environment</b>	-10°C to +60°C (-10°F to +140°F), 0% to 90% RH non-condensing
<b>Standards Safety</b>	IEC 60601-1 FCC Part 15B, Part 15c
<b>Classification</b>	Class I / Internally powered equipment No applied part; <u>Not category AP / APG equipment</u> IPX 1

## 11 Safety and Regulatory Compliance

**The Care Panel complies with EN/IEC 60601-1.**

### FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

### Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of FCC RF Rules.

### Proximity Disclaimer

During operational use of the CarePanel, the unit must be placed at least 20cm away from any person.

**CAUTION:** To comply with the limits of the Class B digital device, pursuant to Part 15 of the FCC Rules, this device is comply with Class B limits. All peripherals must be shielded and grounded. Operation with non-certified peripherals or non-shielded cables may results in interference to radio or reception.

**CAUTION:** Excel Medical Electronics is not responsible for any radio or television interference caused by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

## 11 More Information

For more information, please contact Excel Medical Electronics directly.



Excel Medical Electronics, LLC.  
801 Maplewood Dr. Ste 26  
Jupiter, FL 33458

P. 561-743-4380  
F. 561-748-8889

Email: [support@excel-medical.com](mailto:support@excel-medical.com)