

MPAD-800

Medical Tablet

User's Manual 2nd Ed

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- Cortex is the registered trademark of ARM Holdings
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Packing List

Before setting up your product, please make sure the following items have been shipped:

Item	Quantity
● MPAD-800 with Android 10.1	1
● AC/DC power adapter	1

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

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About this Document

This User's Manual contains all the essential information, such as detailed descriptions and explanations on the product's hardware and software features (if any), its specifications, dimensions, jumper/connector settings/definitions, and driver installation instructions (if any), to facilitate users in setting up their product.

Safety Precautions

Please read the following safety instructions carefully. It is advised that you keep this manual for future references

1. All cautions and warnings on the device should be noted.
2. Make sure the power source matches the power rating of the device.
3. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
4. Always completely disconnect the power before working on the system's hardware.
5. No connections should be made when the system is powered as a sudden rush of power may damage sensitive electronic components.
6. If the device is not to be used for a long time, disconnect it from the power supply to avoid damage by transient over-voltage.
7. Always disconnect this device from any AC supply before cleaning.
8. While cleaning, use a damp cloth instead of liquid or spray detergents.
9. Make sure the device is installed near a power outlet and is easily accessible.
10. Keep this device away from humidity.
11. Place the device on a solid surface during installation to prevent falls
12. Do not cover the openings on the device to ensure optimal heat dissipation.
13. Watch out for high temperatures when the system is running.
14. Do not touch the heat sink or heat spreader when the system is running
15. Never pour any liquid into the openings. This could cause fire or electric shock.
16. As most electronic components are sensitive to static electrical charge, be sure to ground yourself to prevent static charge when installing the internal components. Use a grounding wrist strap and contain all electronic components in any static-shielded containers.

17. If any of the following situations arises, please contact our service personnel:
- i. Damaged power cord or plug
 - ii. Liquid intrusion to the device
 - iii. Exposure to Moisture
 - iv. Device is not working as expected or in a manner as described in this manual
 - v. The device is dropped or damaged
 - vi. Any obvious signs of damage displayed on the device
18. DO NOT LEAVE THIS DEVICE IN AN UNCONTROLLED ENVIRONMENT WITH TEMPERATURES BEYOND THE DEVICE'S PERMITTED STORAGE TEMPERATURES (SEE CHAPTER 1) TO PREVENT DAMAGE.
19. Warning: To avoid the risk of electric shock, this equipment must only be connected to a supply mains with protective earth. **(Avertissement: Pour éviter tout risque de choc électrique, cet appareil doit être connecté à une alimentation secteur avec une prise de terre)**
20. Warning: Do not modify this equipment without authorization of the manufacturer. **(Avertissement: Ne pas modifier cet équipement sans l'autorisation du fabricant)**
21. Warning: It is necessary for checking or replacing the battery pack every year. **(Avertissement: Il est nécessaire de vérifier ou de remplacer la batterie chaque année)**
22. External equipment intended for connection to signal input/output or other connectors, shall comply with relevant UL / IEC standard (e.g. UL 1950 for IT equipment and ANSI/AAMI ES 60601-1: 2005 AND CAN/CSA-C22.2 No. 60601-1:08 / IEC 60601 series for systems - shall comply with the standard IEC 60601-1-1, Safety requirements for medical electrical systems. Equipment not complying with UL 60601-1 shall be kept outside the patient environment, defined in the standard.

23. Disconnect device of the EQUIPMENT is plug. For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.

FCC Statement

Warning!



This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

Caution:

There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions and your local government's recycling or disposal directives.

Attention:





Il y a un risque d'explosion si la batterie est remplacée de façon incorrecte. Ne la remplacer qu'avec le même modèle ou équivalent recommandé par le constructeur. Recycler/les batteries usées en accord avec/les instructions du fabricant et/les directives gouvernementales de recyclage.

Classification

1. Degree of protection against electric shock: not classified
2. Degree of protection against the ingress of water: IP54
3. Mode of operation: Continuous
4. Type of protection against electric shock: Class I equipment
5. No Applied Part, No AP/APG

Safety Symbol Description

The following safety symbols are the further explanations for your reference.

 The logo consists of a circle with the word "CLASSIFIED" at the top. Inside the circle, the letters "UL" are prominently displayed, with a smaller "C" to the left and "US" to the right.	Medical equipment with respect to electric shock, fire and mechanical hazards only in accordance with ANSI/AAMI ES 60601-1 (2005) + AMD (2012) and CAN/CSA-C22.2 No. 60601-1:14
 An icon of an open book with a small figure of a person standing inside the pages, representing a manual or document.	Attention, consult ACCOMPANYING DOCUMENTS.
 A power symbol consisting of a circle with a vertical line extending upwards from the top center.	Stand-by
 A symbol for ground, consisting of a circle with a vertical line extending upwards from the top center, and three horizontal lines of decreasing length extending downwards from the bottom center.	Ground wire Protective Ground wire.

Note:

Follow the national requirement to dispose unit.

Introduction

MPAD-800 Rugged Tablet Computer is used in the hospital environment. The application such like ward, emergency room and nurse/doctor use tablet.

MPAD-800 was regarded as Medical Device Data Systems (MDDS). It is a hardware product that transfer, store, convert formats, and display medical device data. MDDS are not intended to be used for active patient monitoring.

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Chapter 1

Product Specifications

1.1 Specifications

System

Processor	ARM® Cortex® Quad-Core up to 1.6 GHz
System Memory	2 GB SDRAM
LCD Display	8" (1280x 800) TFT LCD with 2-point P-cap
Communication	WiFi a/b/g/n/ac, Bluetooth 4 WPA and WPA2(Personal) encryption
I/O Port	USB 2.0 Type C x 1 USB 2.0 Type A x 1 Volume Up/Down 3.5 mm Stereo Headphone Jack x 1 DC-In Jack x 1 Built-In Speaker & Microphone nanoSIM card Slot MicroSD card slot
Storage	16 GB eMMC Flash
Camera	Front 2MP, Rear 8MP with Flash LED
Sensor	Built-in Light Sensor Built-in G-Sensor Built-in Vibration Motor
OS	Android 10.1

Mechanical

Color	White
Dimension(W x H x D)	136.6 x 219 x 21 mm (5.38 x 8.58 x 0.83")
Gross Weight	0.67 Kg (1.48 lb)

Environmental

Operating Temperature	0°c ~ 28°c
Storage/Transport Temperature	-20° ~ 50°c
Operating Humidity	30 ~ 75%
Storage/Transport Humidity	10 ~ 95%
Operating Pressure	700 to 1060 hPa
Storage/Transport Pressure	700 to 1060 hPa
Vibration	Random Vibration: 5Hz..500Hz, 0.5grms (operating & non-operating)
Drop	80cm within packing
ESD	Air+/- BKV, Contact+/- 4KV
EMI/ Safety	FCC Class B/ UL

Power Supply

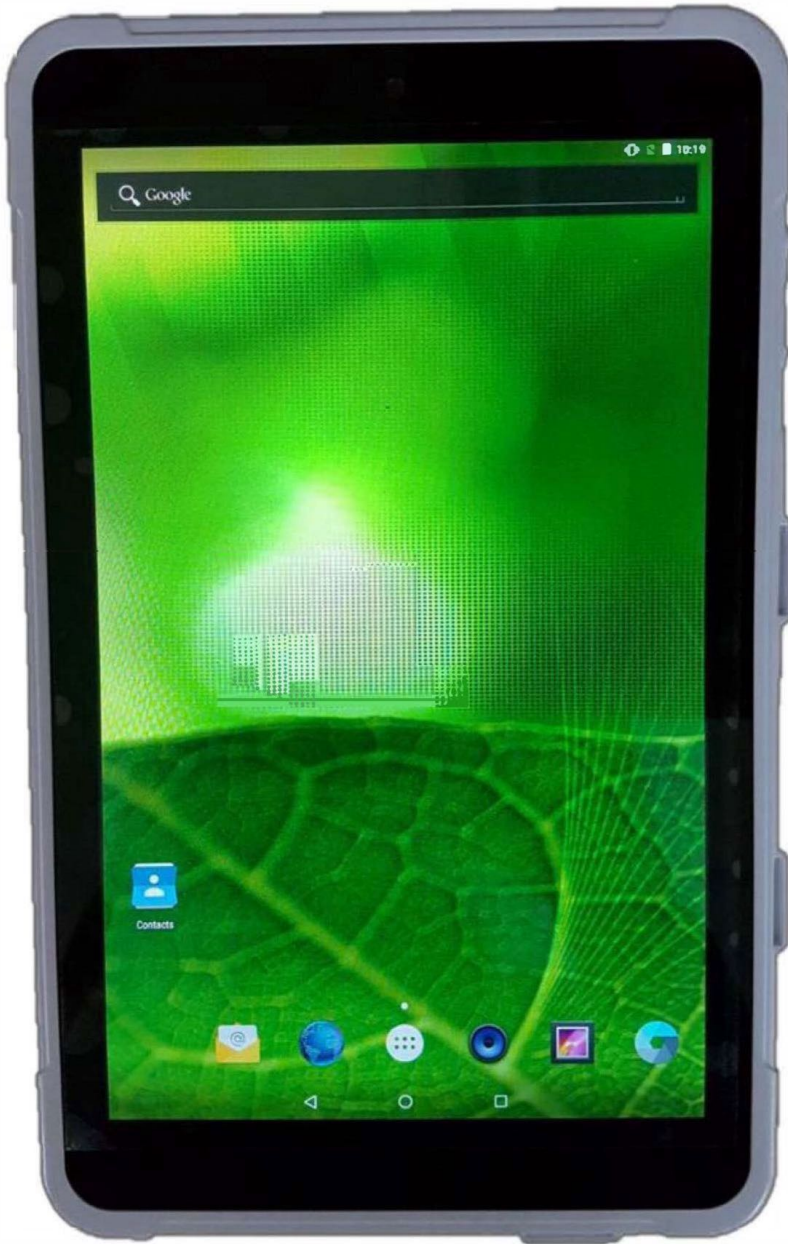
AC/DC Adapter	A C Power Input: 100 ... 240 Vac, 50 ... 60 Hz Output: DC 12V, 5.42 A Model: FSP GROUP INC./ FSP065M-DHA
Battery	Lithium-Polymer High Capacity Battery Model: JOULESMILES CO LTD/ 800 Rating: 7.2 Vdc, 4540 mAh, 32.688 Wh

Chapter 2

Getting Started

2.1 Product Overview

Front View



Side View (Left)



Side view (Right)



Rear View



2.2 Turning On the Device

The power button turns your device on and off. Hold the button for three seconds to power on.

To start or wake it up from sleep mode, hold the power button for 0.5 seconds till the shutdown confirmation is shown. If the system remains unresponsive, press and hold the power button to force power off (may result in data loss). It is strongly recommended that important data is backed up on a regular basis.

When turn on unit and the battery is charging, the LED Indicators will be bright orange.

When unit has fully charged battery, the LED Indicators will be light off.

2.3 Turning Off the Device

Turning off MPAD-800 properly is important for system reliability. Push the power button, click "Power off" and then the system will shut down automatically.

Appendix A

Statements

A.1 Statements

Declarations and Safety Statements

Federal Communications Commission Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference (2) This device must accept any interference received, including interference that may cause undesired operation.

This device 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 causes 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 equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

RF Exposure Information (SAR)

This device meets the government's requirements for exposure to radio waves.

This device is designed and manufactured not to exceed the emission limits for exposure to radiofrequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard employs a unit of measurement known as the Specific Absorption Rate (SAR). The SAR limit set by the FCC is 1.6W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the EUT transmitting at the specified power level in different channels.

The highest SAR value for the device as reported to the FCC is 1.38 W/kg when placed next to the body.

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of www.fcc.gov/oet/ea/fccid on the FCC ID:

2A0OUMPAD800WBL

This device is in compliance with SAR for general population/uncontrolled exposure limits in ANSI/IEEE C95. 1-1999 and has been tested in accordance with the measurement methods and procedures specified in applicable FCC KDB guidance.

A.2 Canadian Notice

IC Regulations

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

IC Radiation Exposure Statement

This EUT is compliant with SAR for general population/uncontrolled exposure limits in IC RSS-102 and has been tested in accordance with the measurement methods and procedures specified in IEEE 1528.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

The County Code Selection feature is disabled for product marketed in the U.S. and Canada.

For products available in the U.S./Canada markets, only channels 1-11 can be operated. The selection of other channels is not possible.

A.3 Safety Caution

Important Safety Instructions

Power Safety Requirement

Products with electrical current ratings up to 3A and weighs more than 1 Kg must use approved power cords greater than or equal to: VCTF, 3G or 0.75mm².

Basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

Do not use this product near water, for example, near a bathtub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.

Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.

Do not use the telephone to report a gas leak in the vicinity of the leak.

Use only the power cord and batteries indicated in this manual. Do not dispose of batteries in a fire. They may explode. Check with local codes for possible special disposal instructions.

Instructions importantes de securite.

Exigences de securite concernant l'alimentation.





Les produits dont le courant electrique monte jusqu'a 3A et pesant plus de 1Kgs doivent utiliser un cordon d'alimentation approuve egal ou superieure a VCTF, 3G ou 0.75mm²

Des mesures de precaution de base doivent toujours etre suivies afin de reduire / les risques d'incendie, de choc electrique et de blessures aux personnes, incluant:

- *Ne pas utiliser ce produit pres de l'eau, par exemple dans une baignoire, une cuvette, un evier, une machine a laver, un sous-sol humide ou une piscine.*
- *Eviter d'utiliser un telephone (autre que sans fil) pendant un orage electrique? il y a un risque de choc electrique a distance lie a la foudre.*

- *Ne pas utiliser le téléphone pour alerter/ors d'une fuite de gaz si vous êtes dans le voisinage de la fuite*
- *Utiliser seulement le cordon d'alimentation et la batterie indiqués dans le manuel. Ne pas jeter les batteries dans le feu. Elles pourraient exploser. Vérifier/les dispositions locales de recyclage.*

A.4 Battery Disposal

	<p>There is a risk of explosion if the battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.</p> <p><i>Il ya un risque d'explosion si la batterie est remplacée par un autre type incorrect.</i></p> <p><i>Disposer de la batterie en accord avec /es instructions.</i></p>
	<p>This symbol indicates that the battery should NOT be placed in municipal waste.</p>
	<p>DO NOT throw the tablet with municipal waste. This product is designed for proper reuse of parts and recycling. This symbol indicates that the products (electrical, electronic equipment and mercury-containing button cell battery) should not be placed in municipal waste. Check local regulations for disposal of electronic products.</p>
	<p>SAFE TEMP: The MPAD-800 should only be used in environments between -20 °C (-4 °F) and 50 °C (122 °F).</p>

Regulatory information / Disclaimers

Installation and use of this Wireless LAN device must be in strict accordance with the instructions included in the user documentation provided with the product. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of this device, or the substitution of the connecting cables and equipment other than manufacturer specified. It is the responsibility of the user to correct any interference caused by such unauthorized modification, substitution or attachment. Manufacturer and its authorized resellers or distributors will assume no liability for any damage or violation of government regulations arising from failing to comply with these guidelines.

A.5 Battery Caution

There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Il y a un risque d'explosion si la batterie est remplacée par un autre type incorrect. Disposer de la batterie en accord avec ses instructions.

Regulatory information / Disclaimers

Installation and use of this Wireless LAN device must be in strict accordance with the instructions included in the user documentation provided with the product. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment. The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of this device, or the substitution of the connecting cables and equipment other than manufacturer specified. It is the responsibility of the user to correct any interference caused by such unauthorized modification, substitution or attachment. Manufacturer and its authorized resellers or distributors will assume no liability for any damage or violation of government regulations arising from failing to comply with these guidelines.

A.6 Adapter Caution

This MPAD-800 is for use with the model NO. FSP065M-DHA