

Medical Cart Computer, DT313 SERIES

User's Manual

Intended of Use:

The DT313 series Medical Cart Computer is intended to serve as a display-integrated computing platform for integration with hospital system. This device is designed for general purpose for hospital environment. For data collection and display for reference. It shall not be used for life-supporting system.

Product Introduction

Thank you for acquiring the DT Medical Cart Computer DT313 series, a 13.3-inch TFT display-integrated, medical computing platform, offering adaptability to mounting configurations and application paradigms, including information appliance, thin client for server computing, and SSD-equipped options.

It's for patient monitor is suitable for such image intense medical applications, nursing stations, or other places within the hospital or clinic.

Please take a few moments to review the contents of this document to ensure that the setup and startup proceed smoothly. The DT313 series is ready for use, out of the box, in its default configuration when powered by the power source provided.

The following discussion offers guidance on the hardware elements and features of the DT313 series. Please refer to your device provider for information pertaining to the software operating system or Software applications.








Definitions




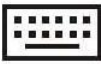




WARNING A WARNING statement provides important information about a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION A CAUTION statement provides important information about a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient or in damage to the equipment or other property.

NOTE A NOTE provides additional information intended to avoid inconveniences during operation.

Explanation of Graphical Symbols

Symbol	Description
	Follow the national requirement to dispose unit.
	European Conformance
	US Conformance
	ISO 7000-1641: Follow operating instructions or Consult instructions for use.
	IEC 60417-5031: Direct current.
	Warning: dangerous voltage.
	Stand-by

	<i>Customize</i>
	<i>Mobility Center</i>
	<i>Security</i>
	<i>Keyboard</i>
	<i>IEC 60417-5032: AC</i>
	<i>Atmospheric pressure limitation</i>
	<i>Humidity limitation</i>
	<i>Temperature limitation</i>

Safety Instructions

1. Read these safety instructions carefully.
2. Keep this User's Manual for later reference.
3. Disconnect this equipment from any DC outlet before cleaning.
4. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible.
5. Keep this equipment away from humidity.
6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall may cause damage.
7. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
8. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
9. All cautions and warnings on the equipment should be noted.
10. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over voltage.
11. Never pour any liquid into an opening. This may cause fire or electrical shock.
12. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
13. If one of the following situations arises, get the equipment checked by service personnel:
 - a. The power cord or plug is damaged.
 - b. Liquid has penetrated into the equipment.
 - c. The equipment has been exposed to moisture.
 - d. The equipment does not work well, or you cannot get it to work according to the user's manual.
 - e. The equipment has been dropped and damaged.
 - f. The equipment has obvious signs of breakage.
14. Environmental conditions:

Temperature	Transportation: -20°C – 60°C ; Operation: 0°C – 40°C; Storage: -20°C – 60°C
Humidity	Transportation: 0% – 90%; Operation: 0% – 90%; Storage: 0% – 90%
Atmospheric Pressure	Transportation: 70,0 kPa to 106,0 kPa; Operation: 70,0 kPa to 106,0 kPa; Storage: 70,0 kPa to 106,0 kPa

15. If your computer is losing dramatic time or the BIOS configuration reset to default, the backup battery has no power.

Caution	<i>1. Do not replace battery yourself. Please contact a qualified technician or your retail. 2 . The Computer is provided with a battery-powered real-time clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacture. Discard used batteries according to the manufacturer's instructions.</i>
Caution	<i>1. Ne pas remplacer vous-même. Veuillez contacter un technicien qualifié ou votre commerce de détail. 2 . L'ordinateur est fourni avec une pile de l'horloge en temps réel du circuit. Il y a un risque d'explosion si la batterie est remplacée de manière incorrecte. Remplacez-la uniquement par une batterie de type identique ou équivalent recommandé par le fabricant. Jetez les piles usées conformément aux instructions du fabricant.</i>

16. CLASSIFICATION:
 - Supply Class I adapter
 - No applied part
 - IPX0
 - Continuous Operation
 - Not AP or APG category
17. Disconnect device: Appliance inlet of Power Adapter, please do not to position the Power Adapter so that it is difficult to operate the disconnection device.
18. Follow the national requirement to dispose unit.
19. Maintenance: to properly maintain and clean the surfaces, use only the approved products or clean with a dry applicator.
20. Contact information:
DT Research, Inc
2000 Concourse Drive, San Jose, CA 95131, U.S.A

DT Research, Inc. Taiwan Branch
6F., No.36 Wuquan 7 th Rd., Wugu Dist. New Taipei City 248 Taiwan
TEL: (02)-2298-1039

21.



MEDICAL – GENERAL MEDICAL EQUIPMENT
AS TO ELECTRICAL SHOCK, FIRE AND MECHANICAL
HAZARDS ONLY IN ACCORDANCE WITH ANSI/AAMI ES
60601-1 (2005) + AMD (2012) & "CAN/CSA-C22.2 No.
6060-1 (2008) + (2014)

22. This equipment shall not be used for life support system.
23. A periodical checking of power adapter is necessity if they are any abnormal condition happened shall be contact with manufacturer, refer to item 22.
24. The equipment is placed front side in normal use that shall not be undertaken in transport position.
25. If you notice any abnormalities such as odor, noise, or smoke, stop using this device. Otherwise a fire or burn may result. Remove the batteries carefully to avoid burning yourself, and contact your dealer or consult DT RESEARCH INC.
26. External equipment intended for connection to signal inputs, signal outputs or other connectors shall comply with the relevant product standard e.g. IEC 60950-1 or IEC 62368-1 for IT-equipment and the IEC 60601-series for Medical Electrical Equipment. In addition, all such combinations – Medical Electrical Systems – shall comply with the safety requirements stated in the general standard IEC 60601-1, edition 3, clause 16. Any equipment not complying with the leakage current requirements in IEC 60601-1 shall be kept outside the patient environment i.e. at least 1.5 m from the patient support or shall be supplied via a separation transformer to reduce the leakage currents.

Any person who connects external equipment to signal inputs, signal outputs or other connectors has formed a Medical Electrical System and is therefore responsible for the system to comply with the requirements. If in doubt, contact qualified medical technician or your local representative.

27.

FCC Regulations

●This device complies with part 15 of the 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.

●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 radiated 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.

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

Packing List

Before installing your Digital Terminal, ensure that the following materials have been received:

- Medical Cart Computer, DT313
- User's manual
- Power Adapter , EDAC POWER ELECTRONICS CO LTD, Model EM11011M (Rated Input 100-240 Vac, 2.0-1.0 A, 50-60 Hz. Output: 19 Vdc,6.31A)
- Base stand (optional)

- VESA mount (optional) ,expected service life:7 Years
- Desktop Charging Cradle(optional) ,expected service life:7 Years

Warning	<i>To prevent electric shock, Do not remove cover. No user serviceable parts inside, refer servicing to qualified personnel. This equipment must only be connected to a supply mains with protective earth.</i>
Attention	<i>Pour éviter tout choc électrique, ne pas retirer le couvercle. L'intérieur ne contient pas de composants, se reporter l'entretien à du personnel qualifié.</i>

Warning	<i>Do not modify this equipment without authorization of the manufacturer.</i>
Attention	<i>Ne pas modifier cet équipement sans autorisation du fabricant.</i>

Warning	<i>To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective earth."</i>
Attention	<i>Pour éviter le risque de choc électrique, cet appareil doit être connecté à une alimentation secteur avec terre de protection.</i>

Warning	<i>During the operation, Do not touch the metal part of battery connector/SIP/SOP output on Panel PC and the PATIENT simultaneously.</i>
Attention	<i>Au cours de l'opération, ne pas toucher la partie métallique du connecteur de pile/SIP/SOP sortie sur Panel PC et le patient en même temps.</i>
Warning	<i>The Panel PC are intended use for general operator. Not intended for patient used.</i>
Attention	<i>Les Panel PC sont utilisation prévue pour l'opérateur. Ne pas utiliser patient.</i>

Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked "Hospital Only" or "Hospital Grade".

Use a power cord that matches the voltage of the power outlet, which has been approved and complies with the safety standard of your particular country.

Accessory equipment connected to the analog and digital interfaces must be in compliance with the respective nationally harmonized IEC standards (i.e. IEC 60950 for data processing equipment, IEC 60065 for video equipment, IEC 61010-1 for laboratory equipment, and IEC 60601-1 for medical equipment.) Furthermore all configurations shall comply with the system standard IEC 60601-1-1. Everybody who connects additional equipment to the signal input part or signal output part configures a medical system, and is therefore, responsible that the system complies with the requirements of the system standard IEC 60601-1-1. The unit is for exclusive interconnection with IEC 60601-1 certified equipment in the patient environment and IEC 60XXX certified equipment outside of the patient environment. If in doubt, consult the technical services department or your local representative.

Note! Environmental protection
Follow national requirements to dispose of unit.

Function Instructions

1. Input/ Output Ports and Button Functions



Input/ Output Ports

A	Ethernet Port
B	HDMI-out
C	USB 2.0 Port
D	Headphone-out
E	USB 3.0 Port
F	DC-in

Button Functions

BUTTON	ACTION
1	Programmable button
2	Power button
3	Trigger button
4	Battery latch

NOTE: the Handle is optional.



2. Power/Battery LED Status:

- Blue indicates the battery is 25% to 100% charged↵
- Blinking blue indicates the battery is charging↵
- Orange indicates that the battery is between 11% to 25%↵
- Blinking Orange indicates that the battery is below 10%↵

3. Basic Features

The DT313SC-MD/ DT313T-MD wireless tablet integrates a bright and multi-touch display, one USB port, and embedded networking elements such as wireless LAN and Bluetooth. The DT313SC-MD/ DT313T-MD is complemented by a suite of accessories, including battery expansion, charging cradles, and battery charger kit, for a comprehensive user experience.

A DT313SC-MD/ DT313T-MD typically integrates an 802.11ac wireless LAN (WLAN) adapter that may connect to other wireless devices or access points. If your DT313SC- MD/ DT313T-MD does not come with such a network adapter, please consult your device provider to establish the desired network connectivity.

4. Peripherals Support

- Always exercise care when operating and handling the DT313SC-MD/ DT313T-MD.
- Do NOT apply excessive pressure to the display screen.
- We recommend using the Digital Pen (optional) to keep the screen clean.
- Avoid prolonged exposure of the display panel to any strong heat source. Wherever possible, the DT313SC-MD/ DT313T-MD should face away from direct light to reduce glare.
- If the AC-DC power adapter is used to recharge or power the tablet, do NOT use any AC-DC adapter other than the one provided or acquired from the manufacturer or its partners.
- In the unlikely event that smoke, abnormal noise, or strange odor is present, immediately power off the DT313SC-MD/ DT313T-MD and disconnect all power sources. Report the problem to your device provider immediately.
- Never attempt to disassemble the DT313SC-MD/ DT313T-MD, as this will void the warranty.

5. OPERATION

- Start Up
If the power up (from Standby or otherwise) is successful, the appropriate interface will be displayed after a launch sequence of several seconds. The wireless LAN connection may take 10-15 seconds to be established.

- Configuring the Mobile Tablet

The DT313SC-MD/ DT313T-MD may be configured using the utilities and methods dictated by the software operating system. The DT313SC-MD/ DT313T-MD should be configurable for various properties such as user profiles, network features, and several system elements.

- Powering ON and OFF

To activate the DT313SC-MD/ DT313T-MD, push and quickly release the Power Button. The display will come on in a few seconds. To put the DT313SC-MD/ DT313T-MD in Standby mode, push and quickly release the Power Button. To turn the DT313SC-MD/ DT313T-MD off for extended storage, power off safely using any software function that “shuts down computer” provided in the software operating system.

NOTE:

The battery packs shipped with your tablet may be low in power—please use the AC-DC adapter with the DT313SC-MD/ DT313T-MD when setting up for the first time to fully charge the internal battery pack. You may charge the external battery pack with it attached to the DT313SC-MD/ DT313T-MD, or with the optional external battery charger kit.

NOTE:

When the battery pack(s) is (are) charging, the blue-colored Battery LED should blink slowly. If plugging in the AC-DC adapter does not trigger this blinking activity and the LED stays dark, the battery pack(s) may have been drained substantially. Try unplugging/ re-plugging the AC-DC adapter to the DT313SC-MD/ DT313T-MD a few times to activate the charging process.

NOTE:

To conserve power, use (push and quick release) the Power Button to put the tablet in “Standby” mode while not in use. Pushing briefly on the same button will wake up the system within seconds.

NOTE:

Avoid using the Power Button (“hold 4+ seconds” feature) to turn off the tablet—this form of hardware shutdown is intended to be a means of recovery from lockups, and not as normal operation.

- Wireless Networking

Wireless LAN

The DT313SC-MD/ DT313T-MD is often delivered with an embedded (user-inaccessible) 802.11ac WLAN adapter equipped with a hidden custom antenna.

- Through the support of typical WLAN adapters, the DT313SC-MD/ DT313T-MD should be able to detect all 802.11 access points in the vicinity for you to select the access point of your choice for connection.
- The SSID and WEP/WPA/WPA2 (if enabled) parameters on the DT313SC-MD/ DT313T-MD and the access points have to match. The SSID is case-sensitive and it is recommended that you enable WEP/WPA/WPA2 encryption (or advanced alternatives) for secure access.
- When WEP/WPA/WPA2 is enabled, you may need to consult your network administrator or your networking equipment literature to properly configure associated settings such as Authentication mode, etc.

- Refer to the access point operating manuals for setting up the 802.11 access points.
- Bluetooth
The DT313SC-MD/ DT313T-MD offers the Bluetooth module which supports Bluetooth 4.0 standard including Bluetooth 3.0 High Speed and Bluetooth 4.0 Low Energy, which delivers faster speeds (up to 300 Mbps) with low power consumption.

USING THE MOBILE TABLET

Peripherals Support

Through its USB port, the DT313SC-MD/ DT313T-MD supports a wide range of USB-based peripherals. These peripherals are applicable for software installation, applications storage, data storage, and system software recovery and updates.
DT313SC-MD/ DT313T-MD is also compatible with custom mountable cradle options. These securable and mountable cradles provide an interface to VESA mounts and arms, and to ports that may include USB, Ethernet, and pass-through power.

For More Support

Users can download the Tablet Modules Basic Operation Guides from the DT Research website.



To Hold the Tablet.

Left hand: grip the left back side of the tablet with your left hand four index fingers, with thumb resting on the top of the back side of the tablet and palm securely against the back.

Right hand: grip the right back side of the tablet with your right hand four index fingers, with thumb resting on the top of the back side of the tablet and palm securely against the back.

Cleaning the anti-microbial enclosure

- Use a soft/non-abrasive cloth moistened with water to clean the enclosure.
- To prevent scratching the anti-microbial coating, please wipe gently.
- Use Alcohol of between 68 and 75% to clean the surfaces

Intended User Profile

- (1) Education: Mobile Tablet
- (2) User group: General staff
- (3) Knowledge base: understanding the definition of voltage, current and frequency

Additional Information and Assistance

When system runs abnormal, such as:

1. Fail to power on
2. Fail to power off
3. Power LED ON but no DC power output
4. AC power in, but system doesn't power on

Contact your distributor, sales representative, or DT RESEARCH customer service center for technical support if you need additional assistance. Please have the following information ready before you call:

- Product name and serial number
- Description of your peripheral attachments
- Description of your software (operating system, version, application software, etc.)
- A complete description of the problem
- The exact wording of any error messages
- This equipment is a source of electromagnetic waves. Before use please, make sure that there are not EMI sensitive devices in its surrounding which may malfunction therefore.

Hardware Installation

Battery Maintenance

1. When the battery is used in normal situation and room temperature, the life cycle is around 300 to 500 cycles.
2. If the computer is not used more than two weeks and not connected to the power adapter, please take out the battery from the computer. When the battery is not installed in the computer, please charge it at least every three months. If the battery is not used for a long time, it may be over discharged to cause damage.
3. Please store the battery between 10 to 30°C and in dry environment. When the battery is in low temperature, the capacity will decrease. When the battery is in high temperature, it will speed up chemical metabolism and shorten the battery service life. Please don't store the battery in a temperature over 60°C. It may cause the battery explode.

4.

Caution	1. The battery used in this device may present a risk of fire or chemical burn if mistreated. Do not disassemble, heat above 50 degree C, or incinerate. Replace battery with Manufacturer: Guangdong Pow-Tech New Power Co.,Ltd; Model: ACC-006-60K only. Use of another battery may present a risk of fire or explosion.
	2. Dispose of used battery promptly. Keep away from children. Do not disassemble and do not dispose of in fire.
	3 .The Computer is provided with a battery-powered real-time clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacture. Discard used batteries according to the manufacturer's instructions (Replacement of lithium batteries or fuel cells by inadequately trained personnel)

Caution	1. La batterie utilisée dans cet appareil peut présenter un risque d'incendie ou de brûlure chimique si maltraités. Ne pas démonter, chauffer au-dessus de 50 degrés C ou incinérer. Remplacer la pile par Fabricant : Guangdong Pow-Tech New Power Co.,Ltd; Modèle : ACC-006-60K Seulement. L'utilisation d'une autre batterie peut présenter un risque d'incendie ou d'explosion.
	2. Jetez rapidement la batterie. Garder hors de portée des enfants. Ne démontez pas et ne la jetez pas dans le feu.

	<p>3 . L'ordinateur est fourni avec une pile de l'horloge en temps réel du circuit. Il y a un risque d'explosion si la batterie est remplacée de manière incorrecte. Remplacez-la uniquement par une batterie de type identique ou équivalent recommandé par le fabricant. Jetez les piles usées conformément aux instructions du fabricant.</p> <p>(Remplacement des piles au lithium ou les piles à combustible par du personnel mal formé)</p>
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Battery change

1. **Remove the battery:** Push the switch up to unlock the latch, then slide the latch left to remove the battery.

2. **Install the battery:**

Just insert the battery into the battery tray. Make sure the battery is in the correct orientation.

Battery Specifications

Manufacturer/model	Guangdong Pow-Tech New Power Co., Ltd / ACC-006-60K
Battery Capacity	5400mAh or 61.56Wh
Output Voltage	11.4Vdc
Sustaining Time	2 hours for each pack
expected service life	2 Years



Desktop Charging Cradle

BASIC OPERATION GUIDE

Thank you for purchasing the Desktop Charging Cradle (ACC-008-72H) by DT Research, available for charging one (1) Rugged Tablet. The Desktop Charging Cradle features one (1) DC-input jack, one (1) LAN port, one (1) HDMI-output port, one (1) COM port, and four (4) USB ports.



Instructions:

Connect the AC-DC adapter cable to the DC-input jack, and then insert the Tablet system properly for charging.



CAUTION:

This charger must only be used with the specific tablet models for which it is designed. Failure to do so may result in battery or charger damage, or personal injury.

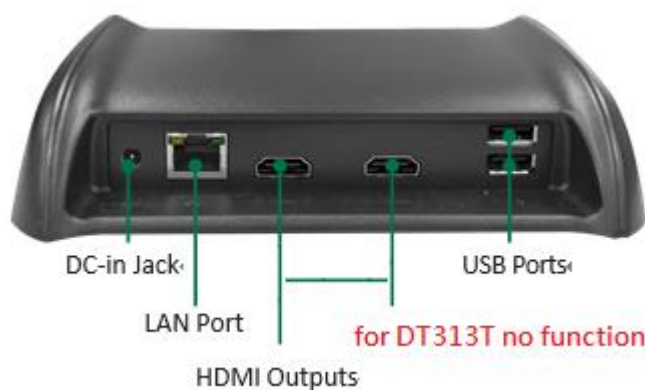
Package Contents:

1. Desktop Cradle
2. Basic Operation Guide

Precautions

1. Always exercise care when operating and handling.
2. Do not disassemble any portion of the charger and adapter, as this will void any product warranty.
3. Do not use any power adapter other than the one provided with the device or acquired from the manufacturer or its partners.
4. In the unlikely event that abnormal noise, strange odor, or smoke is present, immediately disconnect all power sources. Please report the problem to your device provider immediately.

Back View



Side View

Specifications

I/O Ports	
DC-in Jack	1
LAN Port	1
HDMI	2
USB Ports	4 (2 on the back panel, 1 on the left side, 1 on the right side)
AC/DC Adapter*	Input: 100 – 240V AC; Output: 19V DC, 6.31A
Dimensions (H x W x D)	1.93 in x 7.13 in x 6.10 in / 49.1 mm x 179.7 mm x 151.3 mm
Weight	1.39 lbs / 630 g
Temperature	Operation: 0°C – 40°C; Storage: -20°C – 60°C
Humidity	0% – 90% non-condensing

* The AC/DC Adapter is not included in the standard package.

** Specifications subject to change without notice.

CAUTION:

- Only use the Power Adapter that is provided from DT Research.
- The power adapter, charger, and the tablet may become hot during normal use. Allow for proper ventilation around the power adapter, charger, and charging tablet.
- Never force a tablet into a charging bay. Check for any obstructions before insertion.

Tablet Mount Cradle

BASIC OPERATION GUIDE

INTRODUCTION

Thank you for acquiring the latest addition to DT Research's line of tablet accessories – the *WM210 Tablet Mount Cradle*. Featuring compact, robust design, this cradle provides secure placement and charging of the DT301, DT311, or DT313 series tablets whether mounted in vehicles or on the wall. This innovative cradle provides connection ports and promotes ergonomic, efficient access and management of DT Research tablets.

Package Contents

- One (1) WM210 Tablet Wall Mount Cradle
- One (1) VESA Conversion Bracket
- Four (4) silver Bushes for wall mounting
- Four (4) black Nuts for VESA mounting
- Eight (8) M4 Screws

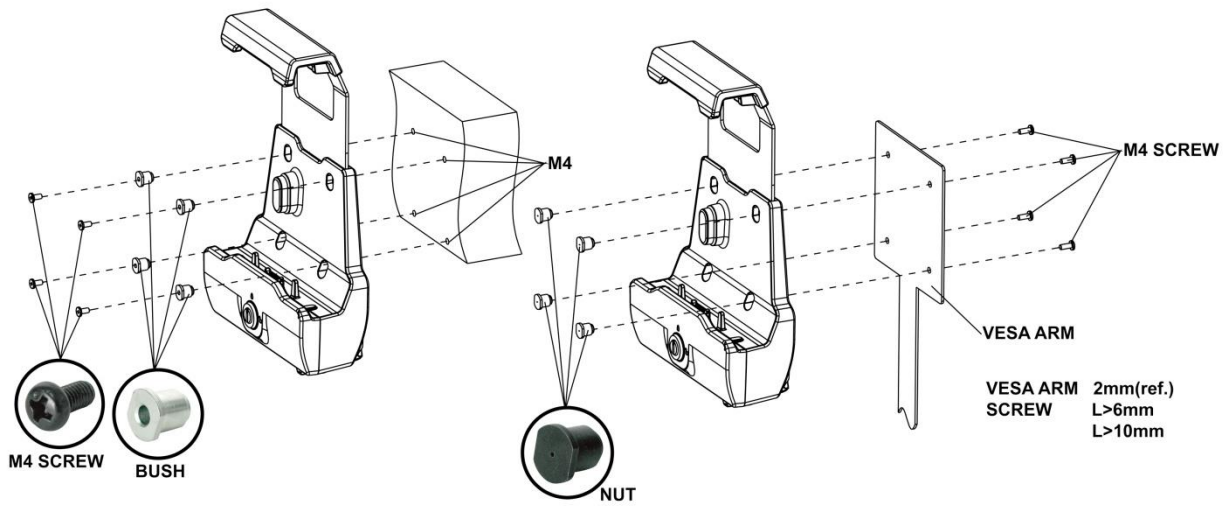
CAUTION:

The cradle you receive may look slightly different than the one in this picture based on the exact model ordered.

Operation

Mounting the Cradle

The Tablet Mount Cradle supports VESA standard mounting options (75 mm x 75 mm) so it can be easily attached onto a wall, in a vehicle, and on a VESA arm



CAUTION:

If using a 100 x 100 VESA stand or arm, the VESA Conversion Bracket is needed. Please place the VESA Conversion Bracket on the back side of the Cradle, and apply the four M4 screws.

Inserting the Tablet into the Cradle

1. Use the key to unlock, and slide the latch on the bottom of the Cradle to loosen the Top Clasp.
2. Insert the bottom part of the Tablet into the cradle first with the connector parts correctly lined up.
3. When the bottom of the Tablet is in place, push the Tablet against the back and into the Cradle.
4. Push down on the Top Clasp, so the top portion of the cradle slides down and locks into the locked-down position.
5. Lock the Cradle with the key.

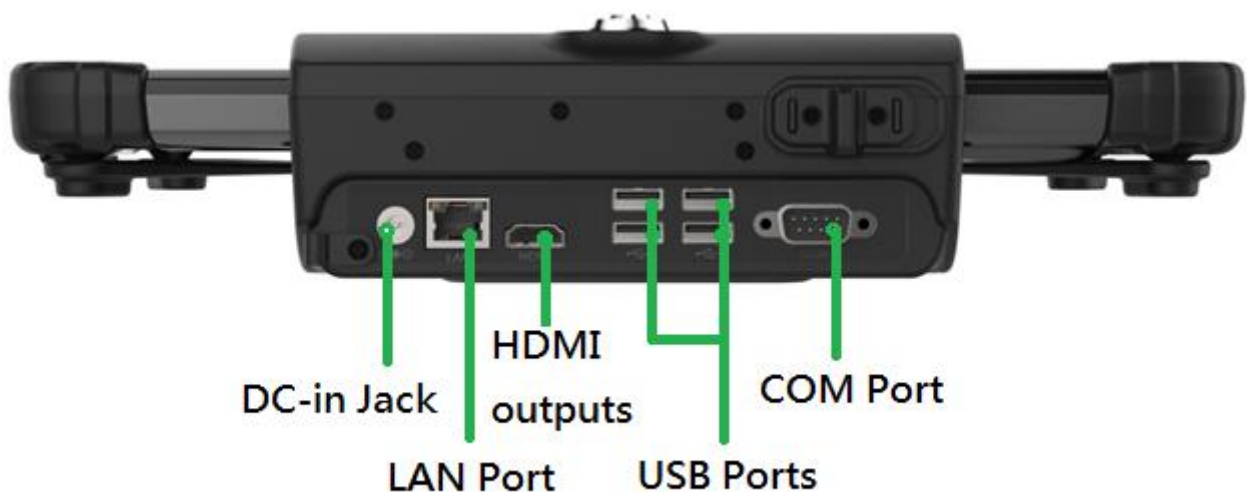
CAUTION:

For proper operation, make sure all necessary connections are in place before powering on the DT Research Tablet.

Releasing the Tablet from the Cradle

1. Unlock the Cradle with the key, then slide the latch on the bottom of the Cradle to loosen the Top Clasp.
2. Using two hands, hold the Tablet on both sides, pull the tablet up to remove the Tablet from the Cradle.

Specifications



Dimensions (H x W x D)	300*177*73 mm
Weight	1.1KG
Temperature	Operation: 0°C – 40°C; Storage: -20°C – 60°C
Humidity	0% – 90% non-condensing

I/O Port	
Ethernet	RJ45 connector for Ethernet x 1
COM	1
USB 2.0	4
HDMI-out	1
DC-in	1


EMC Information

Guidance and manufacture's declaration – electromagnetic emission		
The device <i>is</i> intended for use in the electromagnetic environment specified below. The customer of the user of the device should assure that it is used in such an environment.		
Emission test	Compliance	Electromagnetic environment – guidance
RF emissions CISPR 11	Group 1	The device use RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment. The device is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
RF emission CISPR 11	Class B	
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Complies	

Guidance and manufacture's declaration – electromagnetic immunity			
The device is intended for use in the electromagnetic environment specified below. The customer or the user of device should assure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±2,4,6,8 kV contact ±2,4,8,15 kV air	±2,4,6,8 kV contact ±2,4,8,15 kV air	Floors should be wood, concrete or ceramic tile. If floor are covered with synthetic material, the relative humidity should be at

			least 30%.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<<5% U _T (>95% dip in U _T) for 0.5 cycle 0 % U _T * for 0.5per at 0° ,45° ,90° , 135° , 180° , 225° , 270° , 315° 0 % U _T * for 1per 0% U _T * for 5seconds(250/300per) 70 % U _T * for 25/30per	<<5% U _T (>95% dip in U _T) for 0.5 cycle 0 % U _T * for 0.5per at 0° ,45° ,90° , 135° , 180° , 225° , 270° , 315° 0 % U _T * for 1per 0% U _T * for 5seconds(250/300per) 70 % U _T * for 25/30per	Mains power quality should be that of a typical commercial or hospital environment. If the user of the device requires continued operation during power mains interruptions, it is recommended that the device be powered from an uninterruptible power supply or a battery.
Power frequency (50Hz/60Hz) magnetic field IEC 61000-4-8	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE U _T is the a.c. mains voltage prior to application of the test level.			

Guidance and manufacture's declaration – electromagnetic immunity			
The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6	3 V _{rms} 150 kHz to 80 MHz	3 V _{rms} 6V _{rms} (emf) in ISM and amateur radio bands 80%, 1 kHz Amp. Mod.	Portable and mobile RF communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = 1,2\sqrt{P}$

Radiated RF IEC 61000-4-3	10 V/m 80 MHz to 2.7 GHz	10 V/m	$d=1.2\sqrt{P}$ 80MHz to 800MHz $d=2.3\sqrt{P}$ 800MHz to 2.7GHz Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, ^a should be less than the compliance level in each frequency range. ^b Interference may occur in the vicinity of equipment marked with the following symbol: 
NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			
a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the device is used exceeds the applicable RF compliance level above, the device should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the device. b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.			

Recommended separation distances between portable and mobile RF communications equipment and the device .			
The device is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the device can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the device as recommended below, according to the maximum output power of the communications equipment.			
Rated maximum output power of transmitter (W)	Separation distance according to frequency of transmitter (m)		
	150 KHz to 80 MHz	80 MHz to 800 MHz	800 MHz to 2.7 GHz
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23
For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.			
NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.			
NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			

FCC Statement

This device complies with Part 15 of the 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.

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

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This equipment should be installed and operated with minimum distance 0cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The portable device is designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA). These requirements set a SAR Value of 0.43 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body. The SAR was conducted on the DT313 Mobile Tablet which installed the 8265NGW module. the SAR test distance is 0mm.

IC Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L' émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d' Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

L' exploitation est autorisée aux deux conditions suivantes : (1) L' appareil ne doit pas produire de brouillage; (2) L' appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d' en compromettre le fonctionnement.

SAR Statement

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This equipment should be installed and operated with minimum distance 0cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The portable device is designed to meet the requirements for exposure to radio waves established by the ISED. These requirements set a SAR Value of 0.55 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body. The SAR was conducted on the DT313 Mobile Tablet which installed the 8265NGW module. the SAR test distance is 0mm.

Cet équipement est conforme aux limites d' exposition aux rayonnements ISED établies pour un environnement non contrôlé. L' utilisateur final doit suivre les instructions spécifiques pour satisfaire les normes. Cet équipement doit être installé et utilisé avec une distance minimale de 0 cm entre le radiateur et votre corps. Cet émetteur ne doit pas être co-implanté ou fonctionner en conjonction avec toute autre antenne ou transmetteur. Le dispositif portatif est conçu pour répondre aux exigences d' exposition aux ondes radio établie par le développement énergétique DURABLE. Ces exigences un SAR Value de 0.55 W/kg en moyenne pour un gramme de tissu. La valeur SAR la plus élevée signalée en vertu de cette norme lors de la certification de produit à utiliser lorsqu' il est correctement porté sur le corps. Le SAR est réalisé sur une plaque mobile dt313 équipée d 'un module 826 5ngw. La distance d 'essai est de 0 MM.

The user manual for LE-LAN devices shall contain instructions related to the restrictions mentioned in the above sections, namely that:

the device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

le dispositif utilisé dans la bande 5150-5250 MHz est réservé à une utilisation en intérieur afin de réduire le risque de brouillage préjudiciable aux systèmes mobiles par satellite dans le même canal;

Supplier's Declaration of Conformity

47 CFR § 2.1077 Compliance Information

Unique Identifier Trade Name: XXXX, Model No.: XXXX

Responsible Party – U.S. Contact Information

DT Research, Inc.

2000 Concourse Drive, San Jose, CA 95131, U.S.A.

MAIN

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<https://www.dtresearch.com>

FCC Compliance Statement

This device complies with Part 15 of the 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.