

## BASIC OPERATION GUIDE

# 139CS

### INTRODUCTION

Thank you for acquiring the latest addition to DT Research's line of Medical Micro PC - the 139CS, featuring compact, robust construction powered by the high-performance and energy efficient Intel® processor. The 139CS supports Microsoft® Windows® or Ubuntu operating system and provides complete solutions for a variety of computing needs. The user is offered a choice of software solutions on a platform characterized by the following:

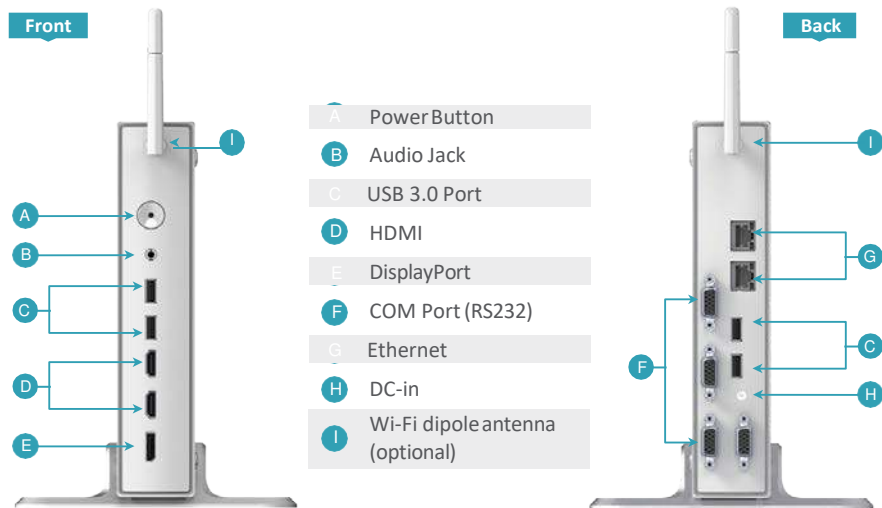
- High-integration and energy-efficient processor technology
- Expanded graphics capabilities for multimedia applications
- Robust construction for reliable operation

### PACKAGE CONTENTS

- 139CS
- AC-DC power adapter with power cord
- Basic operation guide

## PRECAUTIONS

- Always exercise care when operating and handling the 139CS.
- Never disassemble any portion of the enclosure. It will void any product warranty on the 139CS.
- Do not use any AC/DC adapter other than the one provided with the device or acquired from the manufacturer or its partners.
- In the unlikely event that smoke, abnormal noise, or strange odor is present, immediately power down the 139CS and disconnect all power sources.
- Please report the problem to your device provider immediately.



### NOTE:

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

## Powering ON and OFF

The Power Button is located on the front of the 139CS. The Power Button may be configured to function differently depending on the power options of the operating system. In general, to turn the 139CS on, push and release the Power Button on the front bezel. The power LED will be lit (blue) and the corresponding interface will be displayed on the display monitor.

To turn off the device, again depending on software operating system, push and release the Power Button or use a software shutdown interface. In the event of system lockup, the Power Button may be used to perform a reset on the device. To do that, push and hold the Power Button for at least 4 seconds. The system will shut down and all unsaved work may be lost. Pushing on the Power Button again will restart the device.

## Device Ports

The 139CS features an optimal set of I/O ports while preserving the compact size of the system. The video-out connectors, network (10/100/1000 BaseT Ethernet), COM ports, and power ports are supplemented by USB and audio ports. Through its USB ports, the 139CS supports a wide range of USB-based peripherals. These peripherals are applicable in providing the means for software installation, application storage, data storage, and system software recovery and updates.

## Wireless Networking

### Wireless LAN

The Medical-Cart Computer is often delivered with an embedded (user-inaccessible) 802.11ax WLAN adapter equipped with a hidden custom antenna.

- Through the support of typical WLAN adapters, the Medical-Grade Integrated LCD System 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 Medical-Grade Integrated LCD System 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 Medical-Cart Computer features a built-in Bluetooth adapter that operates on the Microsoft Windows Bluetooth protocol. The Bluetooth configuration application is invoked from the System Tray or from the Control Panel. Follow the instructions and options provided within the application to configure and invoke Bluetooth connectivity with the corresponding peripherals.

### NOTE:

Bluetooth devices or accessories that are not compatible with the Microsoft Windows Bluetooth protocol may not work with the devices.

## Federal Communication Commission Interference

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 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.

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

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

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.

## RF Exposure Compliance

To maintain compliance with FCC's RF Exposure guidelines, this equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.

Supplier's Declaration of Conformity

47 CFR § 2.1077 Compliance Information

Unique Identifier Trade Name: 

Model No.: 139CS

**Responsible Party – U.S. Contact Information**

**DT Research, Inc.**

2000 Concourse Drive, San Jose, CA 95131

<http://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.

## Canada

- English:

This device complies with Industry Canada licence-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.

- French:

Le présent appareil est conforme aux CNR d'Industrie 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, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

To maintain compliance with RSS's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.

Pour rester conforme aux directives d'exposition aux radiofréquences de RSS, cet équipement doit être installé et utilisé à une distance minimale de 20 cm du radiateur de votre corps : Utilisez uniquement l'antenne fournie.

1. 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;
2. for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;
3. for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate; and
4. where applicable, antenna type(s), antenna models(s), and worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in section 6.2.2.3 shall be clearly indicated.

1. 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;
2. pour les dispositifs à antenne (s) détachable (s), le gain d'antenne maximal autorisé pour les dispositifs dans les bandes 5250-5350 MHz et 5470-5725 MHz doit être tel que l'équipement soit toujours conforme à la norme e.i.r.p. limite;
3. pour les dispositifs à antenne (s) détachable (s), le gain d'antenne maximal autorisé pour les dispositifs de la bande 5725-5850 MHz doit être tel que l'équipement soit toujours conforme à la norme e.i.r.p. les limites, le cas échéant; et
4. le cas échéant, le (s) type (s) d'antenne, le (s) modèle (s) d'antenne et l'angle (s) d'inclinaison le plus défavorable nécessaire (s) pour rester conforme (e) au p.e. L'exigence relative au masque d'élévation énoncée à la section 6.2.2.3 doit être clairement indiquée.

## RF Exposure Information(RED)

To be protected against all verified adverse effects, the separation distance of at least 0.2m must be maintained between the antenna of the radio having max. 5.22dBi antenna and all persons.

The band 5150-5350 MHz for this device are restricted to indoor use only within all European Union countries.

Hereby, [DT Research, Inc.] declares that the radio equipment type [139CS] is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <http://www.dtresearch.com>.



Maximum EIRP for EU

|                                       |         |
|---------------------------------------|---------|
| Bluetooth:2402MHz-2480MHz             | 14.4dBm |
| Bluetooth LE:2402MHz-2480MHz          | 2.42dBm |
| Wifi: 2412MHz-2472MHz/2422MHz-2462MHz | 20dBm   |
| Wifi: 5150MHz-5725MHz                 | 22.9dBm |
| Wifi: 5725MHz-5875MHz                 | 13.9dBm |