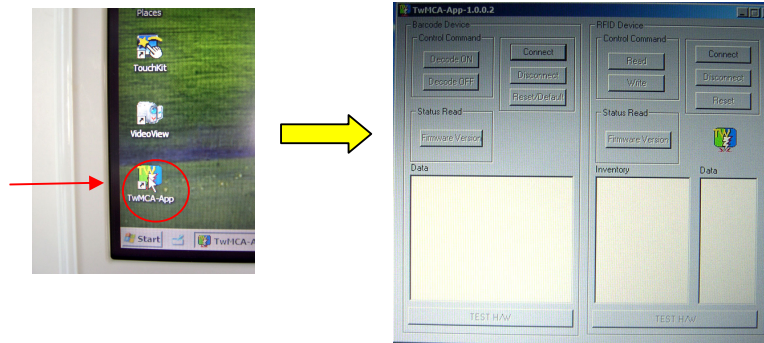
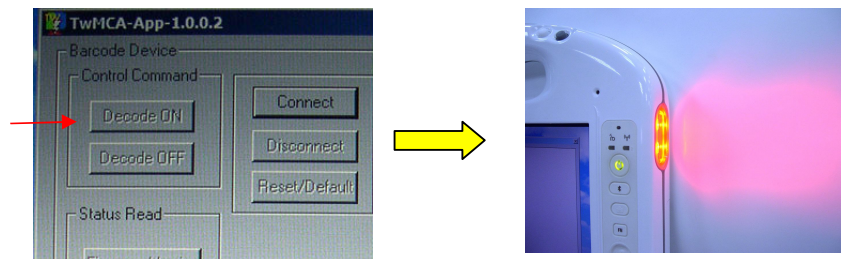


## How to use the Barcode Scanner:

Please click on [TwMCA-App] icon shown on Desktop. Then click it to execute Barcode scanner software.



Then select [Decode ON] button on the application software to turn on built-in barcode scanner. It will be ready to read when there is a red light beam emitting from the device, and complete the reading when the light is off. To stop barcode scanner, please press [Disconnect] button..



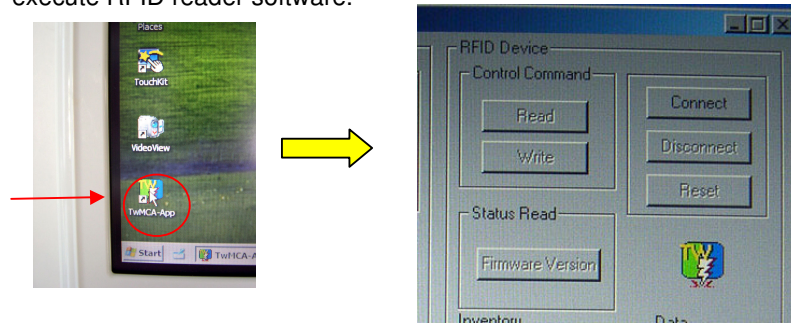
\* Through software developed by ISV to define Barcode scanner function.

## Information about RFID reader

The RFID reader is a compact contactless reader which supports Mifare® cards and ISO15693 (NOTE: Optional supports ISO14443A & ISO 14443B with non-healthcare standard)

## How to use the RFID reader:

Please click on [TwMCA-App] program icon shown on Windows desktop to execute RFID reader software.



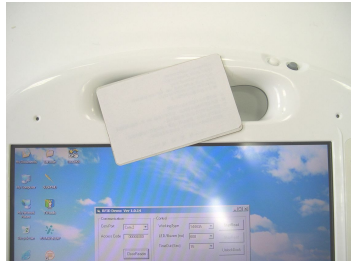
Press [Connect] button on the application software to turn on built-in RFID reader, then put RFID card on the sensor area and press [Read] button. To stop RFID reader, please press [Disconnect] button.



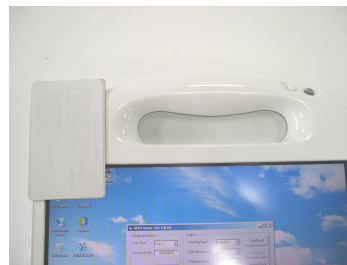
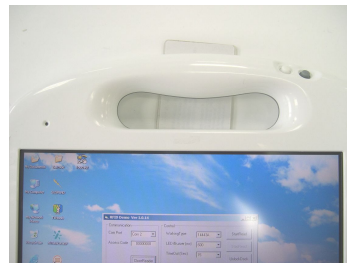
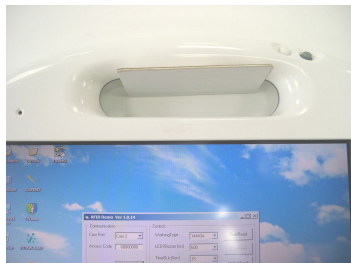
\*Through software developed by ISV to define RFID function.

**Allowable position to read the tag:**

**Correct position**



**Wrong position**



**The maximum reading distances for different protocol:**

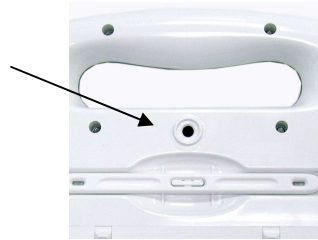
Protocol	Distance
ISO 15693	7cm
ISO 14443A	6cm
ISO 14443B	3cm

## Information about Camera function

The camera lens is on the back of the MCA.

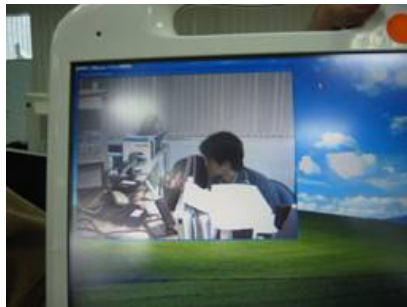
### Features:

- 2 mega pixels resolution (1600 x 1200)
- Support Auto Focus



### How to use the Camera:

Click on the CAMERA button, it will pop up a preview screen, then press the CAMERA button again to save the photo. The preview screen will close after 10 sec automatically.



(camera capture button )



## Communication Components

This system includes built-in Wireless LAN, Bluetooth and 3G functions:

### **Built-in Wireless Local Area Network**

The built-in Wireless Local Area Network (WLAN) interface card can provide a quick access without using cables for the connection to the network equipments. ISM electric wave frequency band as the transmission interface to set up the communications between the host computer and other computers.

The way of processing communications through the WLAN interface card is the same as that through Ethernet interface card. The “Configuration Tool” is a Window application program. If users have a computer equipped with the WLAN interface card, then users can use it to set up the interface card and show the current configuration and status.

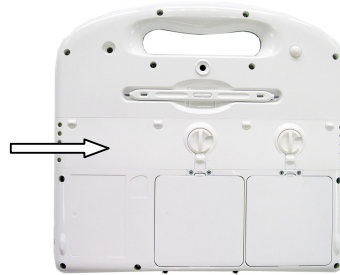
**Note: Contact your distributor for the information of upgrading the wireless local area network.**

## Information about 3G function

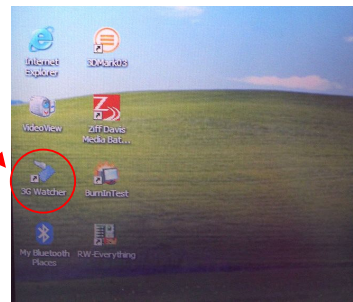
**Note:** The system does not support 3G Voice features.

The system provides 3G function (optional), please remove the SIM card cover. Then insert 3G SIM card into the slot.

**Attention:** WLAN function will be auto turn-off when 3G function is on.




Please click on [3G Watcher] program shown on Desktop to turn on 3G function.



Please follow **3G Watcher Help Topics/Wireless Data Connections/Manage profiles** to create a profile first.

After all settings are completed, click Connect to access Internet.


User will find  on Windows task bar. The indicator shows the received signal strength in dBm up to a maximum of five bars..

Please click **3G Watcher Tools/Turn Radio Off** to stop connection.




## Information about Bluetooth function

A Bluetooth wireless technology is the ability to simultaneously handle both data and voice transmissions. This enables users to enjoy a variety of solutions such as hands-free headset for voice calls, printing and fax capabilities, and synchronizing PDA, laptop, and mobile phone applications.

Please press  hot key to turn on Bluetooth function.

User could check Bluetooth connection status from indicator on Windows task bar. : Bluetooth disconnection : Bluetooth connection

Double click Bluetooth indicator or  on Desktop to turn on application program.



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**Chapter 3**  
**Making**  
**Connections**





## Making Connections

### Right Side Connectors

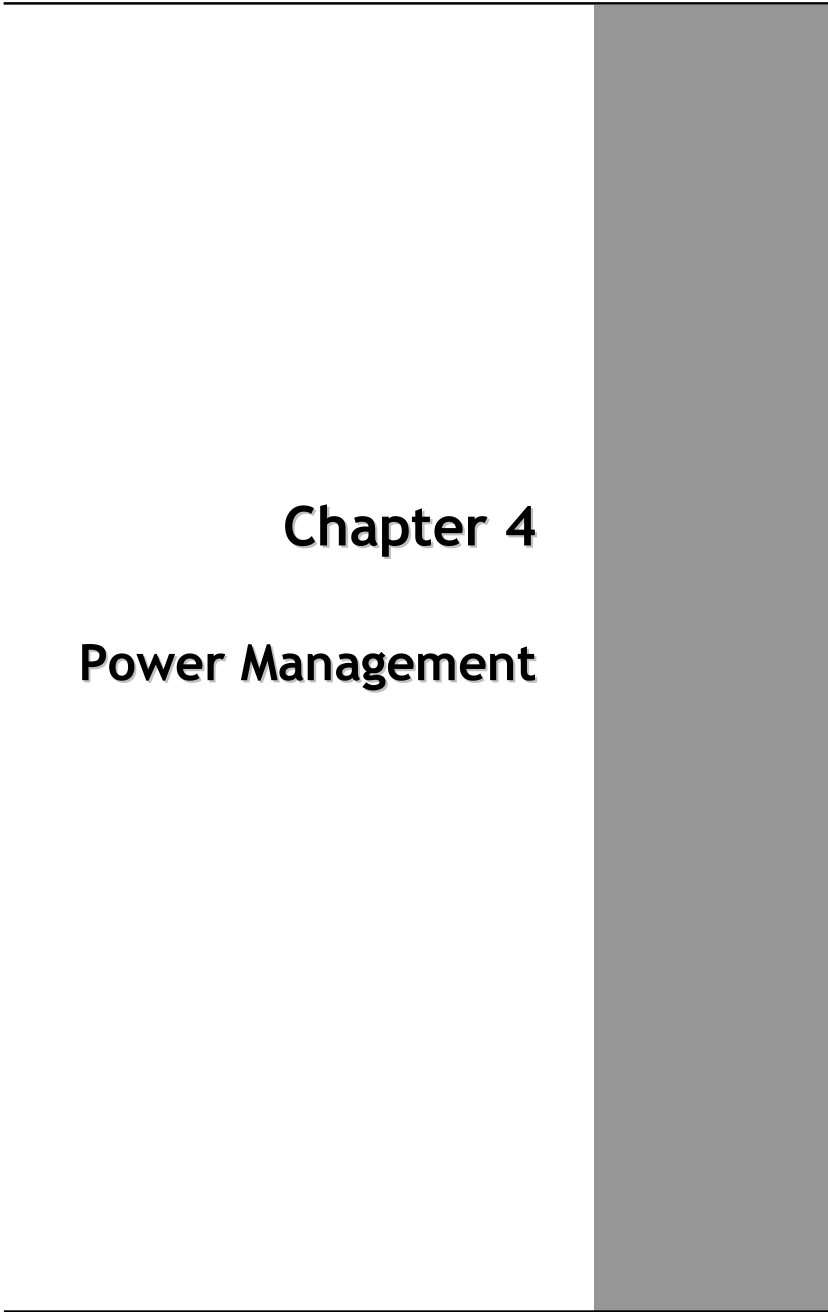


#### **1. DC-in Jack**

Connect the power plug of the AC adapter to this jack.

#### **2. Docking Station connector**

The Connector is reserved for specific purpose which is used to connect to its docking station.



**Chapter 4**  
**Power Management**



## Power Management

### Checking the Battery Level

You can check the remaining battery power in the Windows® battery status indicator located at the lower right-hand corner of the task tray. The Battery Status icon only appears in the task tray while the unit is running on the battery power but not while the unit is running off an external power source through the AC adaptor.

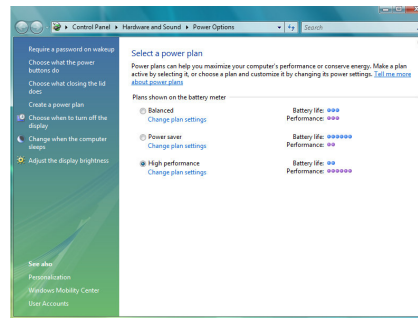


Battery Power Indicator

### Enter **Monitoring Battery Power**

There are two ways to monitor how much power the battery has left.

1. Click Start / Settings / Control Panel / Power Options, then click Power Meter.
2. Moving the cursor to the battery icon on the taskbar is the simplest way to check on battery power status.



If you do not see the battery icon, enable it in **Start / Settings / Control Panel / Power Options**. Choose the Advanced tab and click “Always show icon on the taskbar.”

### Low Battery Alarms

How your MCA responds to a low battery condition is set under **Start / Settings / Control Panel / Power Options / Alarms**.

Two different power alarms can be enabled or disabled: the Low Battery Alarm, and the Critical Battery Alarm.



**Warning:** When battery power is low, the battery indicator will flash red, and the alarm will display a warning on your screen. Take immediate action, such as saving files or connecting to the AC adaptor, or data may be lost.

### **Battery Charging**

When you use the AC adapter to connect your MCA to a power outlet, the internal battery will automatically begin to recharge (get charged first with battery 1, then goes to battery 2 when battery 1 is fully charged, and the MCA is powered by the AC adaptor.) While the battery is charging, the Battery Charge icon on the Indicator panel will be active after 6~12 seconds. When the battery is fully charged, the Battery Charge icon will turn off.

If your MCA is system off, a fully discharged battery will take about 2 hours to recharge. If your MCA is turned on and is not in suspend mode, it will take about 2~3 hours to recharge the battery. Refer to the following table:

	<b>Charging</b>
<b>System On (Under Screen Saver Mode)</b>	<b>2~3 hours</b>
<b>System Off (suspend to RAM)</b>	<b>~2 hours</b>

To ensure the battery be charged to its Max. capacity, we suggest you execute the following steps to refresh battery.

1. Fully charged the battery
2. Enter the BIOS set up menu and stay the unit untouched. Then, the unit can fully discharge the battery to lowest level.
3. Fully discharge the unit to 100%. Then the battery learning is done.



**Note:** The battery only can be charged in the condition of room temp. 0-30 degree C. Other than this range, the battery may not be fully charged. One fully charged Li-Ion battery can run the MCA for approximately 2.25 hours.

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## When to Replace the Battery

Over time, the battery's capacity gradually decreases. We recommend that you replace your battery when you notice that it begins to store significantly less charge.

### Changing the Battery

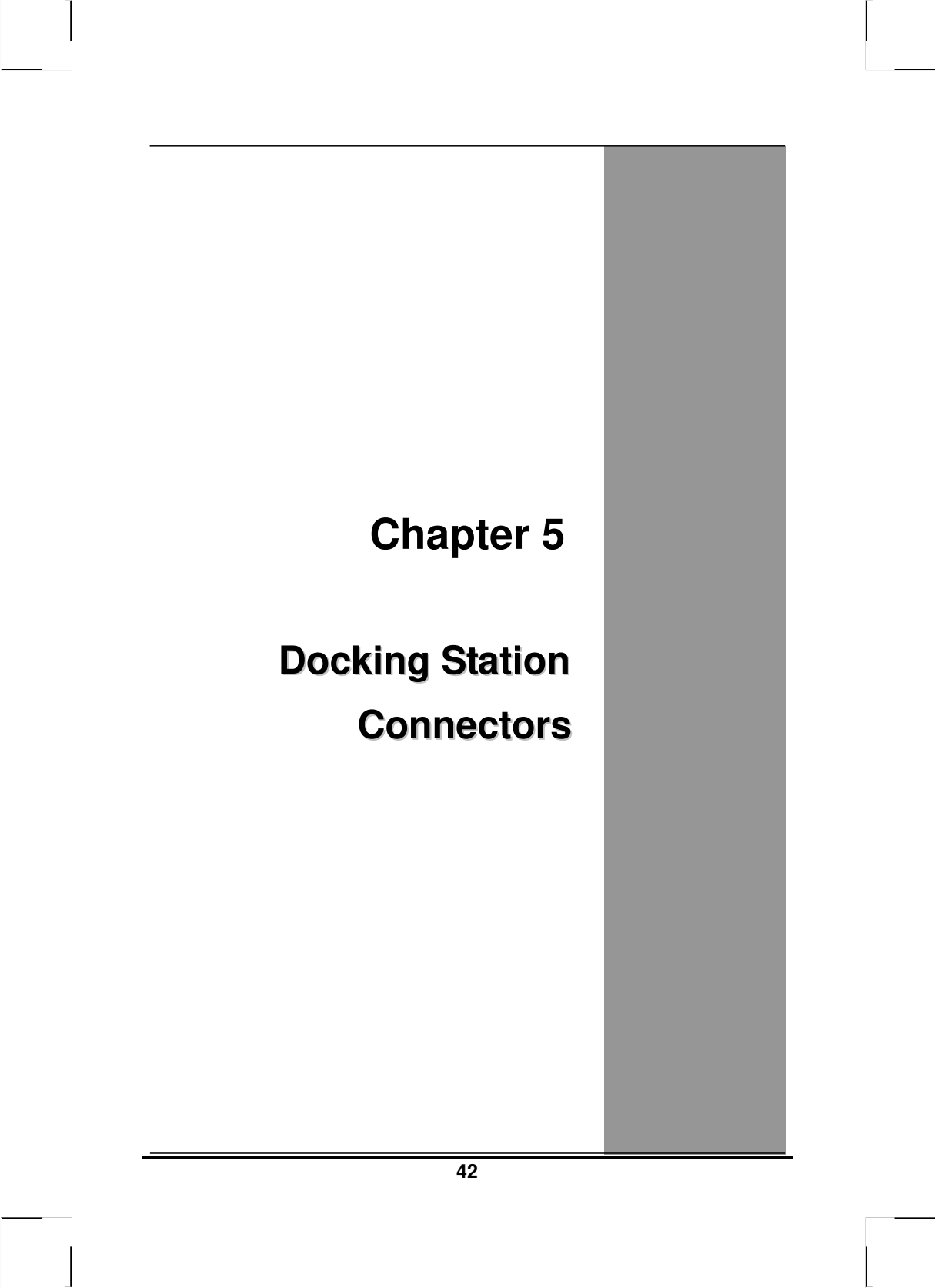
Change the main battery pack as follows:

1. Turn off the MCA.
2. To replace the Battery, reposition the latch ❶ and latch ❷, then gently pull the battery out of the battery bay.
3. Make sure the replacement battery is properly orientated. Then insert the battery into the battery compartment. Check that the latch locks back into position.



## Heat Considerations

The MCA processor has been specially designed to consume little power, and generates very little heat. However, working in a hot environment, or working for long periods may raise the temperature. If the temperature continues to rise, processor activity will be reduced. You may notice a slight loss of performance when this happens.



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**Chapter 5**

**Docking Station  
Connectors**

## Docking Station Connectors – Front & left side



### 1. USB (Universal Serial Bus) Ports

The Universal Serial Bus (USB) is the latest standard for attaching input devices, scanners, and other devices to a PC.

### 2. Kensington Slot

Kensington slot is part of an anti-theft system used as a deterrent to prevent opportunist theft. It is used for attaching a lock-and-cable apparatus.

### 3. LAN RJ-45 Jack

With the built-in Ethernet LAN combo, you can make LAN connections without installing PC cards. Connection speed is 10/100 Mbps.

### 4. LED Indicator



Power	Green when system is active
Battery 1 & 2	Green when battery is fully charged Orange when battery is charging
LAN	Green when the LAN is connected
Lock	Green when the locking mechanism is on

## Docking Station Connectors – Right side



### 1. USB (Universal Serial Bus) Ports

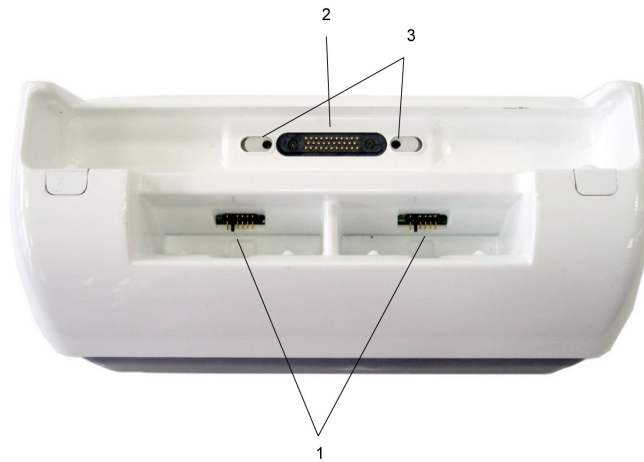
The Universal Serial Bus (USB) is the latest standard for attaching monitors, input devices, scanners, and other devices to a PC.

### 2. Power Cord Entry

Connect the power cord from the AC outlet to this entry. There is a power adaptor embedded inside of the docking station (Input:100V-240V,47Hz-63Hz, output: 78W , 18V).



## Docking Station Connectors – Top side



### 1. Battery charger

Provide 2 battery charging bays. The charging time may vary depending on system and environmental temperature.

### 2. Host slot

The host is used to connect to your MCA.

### 3. Locking mechanism

An electronic lock to keep the unit locked on the dock.



## **Mechanical Specification**

### **Mounting:**

An optional bracket (VESA standard, hole pattern 75 x 75 mm) is available when there is need to mount the docking station for different purposes.

### **Tilt:**

To provide an optimal viewing performance while user is in different operating position, this docking station is capable of adjusting the tilt angle, and it ranges from 5° forwardly, and 25° backwardly.



The page features four small square crop marks, one in each corner, consisting of a thin black line forming a square.

**Appendix A**  
**Statements**

## Statements



### ***Federal Communications Commission 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:

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

Shielded interconnect cables and shielded AC power cable must be employed with this equipment to insure compliance with the pertinent RF emission limits governing this device. Changes or modifications not expressly approved by the system's manufacturer could void the user's authority to operate the equipment.

### ***CAUTION***

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

### ***RF exposure warning***

This equipment must be installed and operated in accordance with provided instructions and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

Max. SAR Measurement (1g)

WLAN: 0.189W/kg

GSM: 0.952 W/kg

WCDMA: 1.24 W/kg

CDMA: 1.04W/kg

### ***Declaration of Conformity***

This device complies with part 15 of the FCC rules. Operation is subject to the following conditions:

- This device may not cause harmful interference
- This device must accept any interference received, including interference that may cause undesired operation.

## **European Notice**



### ***CE Declaration of Conformity***

For the following equipment: Tablet built-in 802.11/b/g/n WLAN module

Is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (89/336/EEC), Low-voltage Directive (73/23/EEC) and the Amendment Directive (93/68/EEC), the procedures given in European Council Directive 99/5/EC and 89/3360EEC.

The equipment was passed. The test was performed according to the following European standards:

- EN 300 328 V.1.4.1 (2003-04)
- EN 301 489-1 V.1.3.1 (2001-09) / EN 301 489-17 V.1.1.1 (2000-09)
- EN 301 893 V.1.2.2 (2003-06)
- EN 50371: 2002
- EN 60950: 2000

**Guidance and manufacturer's declaration –  
electromagnetic emissions**

The T10L1XXXXXX is intended for use in the electromagnetic environment specified below. The customer or the user of the Equipment or System should assure that it is used in such an environment.

<b>Emissions test</b>	<b>Compliance</b>	<b>Electromagnetic environment – guidance</b>
RF emissions CISPR 11	Group 1	The T10LXXXXXX uses 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.
RF emissions CISPR 11	Class B	The T10LXXXXXX 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.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Not applicable	

## Guidance and manufacturer's declaration – electromagnetic immunity

The T10L1XXXXXX is intended for use in the electromagnetic environment specified below. The customer or the user of the T10L1XXXXXX 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	±6 kV contact  ±8 kV air	±6 kV contact  ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors 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  ±1 kV for input/output 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.
interruptions and voltage variations	<5 % $U_T$  (>95 % dip in $U_T$ )	<5 % $U_T$  (>95 % dip in $U_T$ ) for 0,5 cycle	Mains power quality should be that of a typical commercial or hospital environment. If the


<p>on power supply input lines</p> <p>IEC 61000-4-11</p>	<p>for 0,5 cycle</p> <p>40 % <math>U_T</math></p> <p>(60 % dip in <math>U_T</math>)</p> <p>for 5 cycles</p> <p>70 % <math>U_T</math></p> <p>(30 % dip in <math>U_T</math>)</p> <p>for 25 cycles</p> <p>&lt;5 % <math>U_T</math></p> <p>(&gt;95 % dip in <math>U_T</math>)</p> <p>for 5 sec</p>	<p>40 % <math>U_T</math></p> <p>(60 % dip in <math>U_T</math>)</p> <p>for 5 cycles</p> <p>70 % <math>U_T</math></p> <p>(30 % dip in <math>U_T</math>)</p> <p>for 25 cycles</p> <p>&lt;5 % <math>U_T</math></p> <p>(&gt;95 % dip in <math>U_T</math>)</p> <p>for 5 sec</p>	<p>user of the T10LXXXXXX requires continued operation during power mains interruptions, it is recommended that the T10LXXXXXX be powered from an uninterruptible power supply or a battery.</p>
<p>Power frequency (50/60 Hz) magnetic field</p> <p>IEC 61000-4-8</p>	<p>3 A/m</p>	<p>3 A/m</p>	<p>Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.</p>
<p>NOTE UT is the a.c. mains voltage prior to application of the test level.</p>			

### Guidance and manufacturer's declaration – electromagnetic immunity

The T10LXXXXXX is intended for use in the electromagnetic environment specified below. The customer or the user of the T10LXXXXXX should assure that it is used in such an environment.



<b>Immunity test</b>	<b>IEC 60601 test level</b>	<b>Compliance level</b>	<b>Electromagnetic environment – guidance</b>
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms	Portable and mobile RF communications equipment should be used no closer to any part of the T10LXXXXXX including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2,5 GHz	3 V/m	<p><b>Recommended separation distance</b></p> $d = 1,2 \sqrt{P}$ $d = 1,2 \sqrt{P} \text{ 80 MHz to 800 MHz}$ $d = 1,2 \sqrt{P} \text{ 800 MHz to 2,5 GHz}$ <p>where <math>P</math> is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and <math>d</math> is the recommended separation distance</p>

			<p>in metres (m).</p> <p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,<sup>a</sup> should be less than the compliance level in each frequency range.<sup>b</sup></p> <p>Interference may occur in the vicinity of equipment marked with the following symbol:</p> 
<p>NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.</p> <p>NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.</p>			
<p><sup>a</sup> 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 T10LXXXXXX is used exceeds the applicable RF compliance level above, the T10LXXXXXX should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the T10LXXXXXX.</p> <p><sup>b</sup> Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.</p>			

**Recommended separation distances between portable and mobile RF communications equipment and the T10LXXXXXX**

The T10LXXXXXX is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the T10LXXXXXX can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the T10LXXXXXX 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 $d = 1,2 \sqrt{P}$	80 MHz to 800 MHz $d = 1,2 \sqrt{P}$	800 MHz to 2,5 GHz $d = 2,3 \sqrt{P}$
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.

Classification (clause 5):

Class I equipment

No applied part

IP54 (for table PC), IPX0 (for adapter and docking station)

No AP and APG

Continuous operation

]

### **Regulatory statement (R&TTE / WLAN IEEE 802.11b & 802.11g)**

European standards dictate maximum radiated transmit power of 100mW EIRP and frequency range 2.400-2.4835GHz; In France, the equipment must be restricted to the 2.4465-2.4835GHz frequency range and must be restricted to indoor use.

## **Safety Compliance**

### **Safety for Canada**



CAN/CSA C22.2 No 60950-1-03

## **Battery Disposal**

THIS PRODUCT CONTAINS A LITHIUM-ION OR NICKEL-METAL HYDRIDE BATTERY. IT MUST BE DISPOSED OF PROPERLY. CONTACT LOCAL ENVIRONMENTAL AGENCIES FOR INFORMATION ON RECYCLING AND DISPOSAL PLANS IN YOUR AREA.

## **WEEE Symbol**

The WEEE symbol, indicating separate collection for WEEE- Waste of electrical and electronic equipment, consists of the crossed-out wheeled bin, as shown below.



## CAUTION FOR ADAPTER

THIS MCA IS FOR USE WITH MODEL NO. 0335A2065, 0335C2065, JWM180KA1800F02.

## BATTERY CAUTION

DANGER OF EXPLOSION IF 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.

### ***For LPD***

“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.”

### ***W/detachable antenna***

“To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that required for successful communication.”

## **Regulatory Information**

### **Intel( R) Wireless Link 1000**

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[Intel\(R\) Wireless WiFi Link 1000](#)

- [Information for the user](#)

- [Regulatory Information](#)
- 

## **Intel(R) Wireless WiFi Link 1000**

The information in the document applies to the following products:

### **Tri-mode Wireless LAN adaptors (802.11b/802.11g/802.11n)**

Intel(R) Wireless WiFi Link 1000 (model 112BNMMW)

**Note:** Due to the evolving state of regulations and standards in the Wireless LAN field (IEEE 802.11 and similar standards), the information provided herein is subject to change. Intel Corporation assumes no responsibility for errors or omissions in this document. Nor does Intel make any commitment to update the information contained herein,

## **Information for the user**

### **Safety Notices**

### **USA-FCC and FAA**

The FCC with its action in ET Docket 96-8 has adopted a safety standard for human exposure to radio frequency (RF) electromagnetic energy emitted by FCC certified equipment. The Intel(R) Wireless WiFi Link 1000 adapter meets Human Exposure limits found in OET Bulletin 65, Supplement C, 2001, and ANSI/IEEE C95.1, 1992. Proper operation of the radio according to the instructions found in this manual will result in exposure substantially below the FCC's recommended limits.

The following safety precautions should be observed:

- Do not touch or move antenna while the unit is transmitting or receiving.
- Do not hold any component containing the radio such that the antenna is very close or touching any exposed parts of the body, especially the face or eyes, while transmitting.
- Do not operate the radio or attempt to transmit data unless the antenna is connected; if not, the radio may be damaged.
- Use in specific environments:
  - The use of wireless devices in hazardous locations is limited by the constraints posed by the safety directors of such environments.
  - The use of wireless devices on airplanes is governed by the Federal Aviation Administration (FAA).
  - The use of wireless devices in hospitals is restricted to the limits set forth by each hospital.
- Antenna use:
  - In order to comply with FCC RF exposure limits, low gain integrated antennas should be located at a minimum distance of 20 cm (8 inches) or more from the body of all persons.
  - High-gain, wall-mount, or mast-mount antennas are designed to be professionally installed and should be located at a minimum distance of 30 cm (12 inches) or more from the body of all persons. Please contact your professional installer, VAR, or antenna manufacturer for proper installation requirements.
- Explosive Device Proximity Warning (see below)
- Antenna Warning (see below)
- Use on Aircraft Caution (see below)
- Other Wireless Devices (see below)
- Power Supply (Access Point) (see below)

 **Warning:** Do not operate a portable transmitter (such as a wireless network device) near unshielded blasting caps or in an explosive environment unless the device has been modified to be qualified for such use.

#### **Antenna Warnings**

**第十二條**

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

**第十四條**

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

**Radio Approvals**

To determine whether you are allowed to use your wireless network device in a specific country, please check to see if the radio type number that is printed on the identification label of your device is listed in the manufacture OEM Regulatory Guidance document.

**Regulatory Markings**

A list of required regulatory markings can be found on the web at: [http://www.intel.com/network/connectivity/resources/doc\\_library/regulatory/regulatory\\_markings\\_4965AGN.htm](http://www.intel.com/network/connectivity/resources/doc_library/regulatory/regulatory_markings_4965AGN.htm).

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