



User Manual

UTX-3115

ADVANTECH

Enabling an Intelligent Planet

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Declaration of Conformity

FCC Class B

Note: 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.

Warning! *Any changes or modifications made to the equipment which are not expressly approved by the relevant standards authority could void your authority to operate the equipment.*



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.*



Federal Communication Commission Interference 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.

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 transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

FOR MOBILE DEVICE USAGE (>20cm/low power)

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

FOR COUNTRY CODE SELECTION USAGE (WLAN DEVICES)

Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.

Technical Support and Assistance

1. Visit the Advantech website at <http://support.advantech.com> where you can find the latest information about the product.
2. Contact your distributor, sales representative, or Advantech's 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

Warning!



1. *Input voltage rated 12-19 VDC, 3.75 ~ 2.63 A (DC Mode).*
2. *Packing: please carry the unit with both hands, handle with care.*
3. *Maintenance: to properly maintain and clean the surfaces, use only approved products or clean with a dry applicator.*

Safety Instructions

1. Read these safety instructions carefully.
2. Keep this User Manual for later reference.
3. Disconnect this equipment from any AC outlet before cleaning. Use a damp cloth. Do not use liquid or spray detergents for 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. The openings on the enclosure are for air convection. Protect the equipment from overheating. **DO NOT COVER THE OPENINGS.**
8. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient overvoltage.
12. Never pour any liquid into an opening. This may cause fire or electrical shock.
13. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
14. 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.

15. DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT WHERE THE STORAGE TEMPERATURE MAY GO BELOW -20° C (-4° F) OR ABOVE 60° C (140° F). THIS COULD DAMAGE THE EQUIPMENT. THE EQUIPMENT SHOULD BE IN A CONTROLLED ENVIRONMENT.
16. If your computer is losing dramatic time or the BIOS configuration reset to default, the battery has no power.

- Caution!**
1. Do not replace power adaptor 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.



17. CLASSIFICATION:
 - Supply by Class I adapter
 - No applied part
 - Continuous Operation
 - Not AP or APG category
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 cloth.
20. Contact information:
No.1, Alley 20, Lane 26, Rueiguang Road Neihu District, Taipei, Taiwan 114,
R.O.C
TEL: (02)27927818
- 21.



Medical Equipment
With Respect to Electric Shock,
Fire, and Mechanical Hazards Only,
In Accordance with UL 60601-1,
CAN/CSA C22.2 No. 601.1

DISCLAIMER: This set of instructions is given according to IEC 704-1. Advantech disclaims all responsibility for the accuracy of any statements contained herein.

Note! Attention, consult ACCOMPANYING DOCUMENTS.



Industry Canada Statement

This device complies with RSS-210 of the Industry Canada 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.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Caution :

- (i) 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;
- (ii) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and
- (iii) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.
- (iv) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Avertissement:

Le guide d'utilisation des dispositifs pour réseaux locaux doit inclure des instructions précises sur les restrictions susmentionnées, notamment :

- (i) les dispositifs fonctionnant dans la bande 5 150-5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- (ii) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5 250-5 350 MHz et 5 470-5 725 MHz doit se conformer à la limite de p.i.r.e.;
- (iii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5 725-5 825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.
- (iv) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 250-5 350 MHz et 5 650-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

FOR MOBILE DEVICE USAGE (>20cm/low power)

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

User Manual Notice to Users for TCB Certification

FCC/Industry Canada Two Part Stmt:

English Version:

This device complies with FCC Part 15 and 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.

French Version:

Cet appareil est conforme à FCC Partie15 d'Industrie Canada RSS standard exempts de licence (s). Son utilisation est soumise à Les deux conditions suivantes: (1) cet appareil ne peut pas provoquer d'interférences et (2) cet appareil doit accepter Toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement du dispositif.

Per Industry Canada RSS rules:

English version:

This device complies with Health Canada's Safety Code. The installer of this device should ensure that RF radiation is not emitted in excess of the Health Canada's requirement. Information can be obtained at http://www.hc-sc.gc.ca/ewh-sem/pubs/radiation/radio_guide-lignes_direct-eng.php

French version:

Cet appareil est conforme avec Santé Canada Code de sécurité 6. Le programme d'installation de cet appareil doit s'assurer que les rayonnements RF n'est pas émis au-delà de l'exigence de Santé Canada. Les informations peuvent être obtenues: http://www.hc-sc.gc.ca/ewhsemt/pubs/radiation/radio_guide-lignes_direct-eng.php

English Version:

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

French Version:

"Les changements ou modifications non expressément approuvés par la partie responsable de la conformité pourraient annuler l'autorité de l'utilisateur à utiliser cet équipement."

Antenna Stmt:

English Version:

"This device has been designated to operate with the antennas listed below, and having a maximum gain of [X] dB. Antennas not included in this list or having a gain greater than [X] dB are strictly prohibited for use with this device. The required antenna impedance is [Y] ohms."

(equipment manufacturers shall provide proper values of x and y to comply with the applicable RSS.

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least [X] cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. Users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

(Mfrs shall provide value of [X])

French Version:

"Ce dispositif a été désigné pour fonctionner avec les antennes énumérées ci-dessous, et ayant un gain maximal de [X] dB. Antennes pas inclus dans cette liste ou présentant un gain supérieur à [X] dB sont strictement interdits pour une utilisation avec cet appareil. L'impédance d'antenne requise est [Y] ohms. "

(fabricants de matériel doivent fournir des valeurs propres de x et y pour se conformer à la RSS applicable).

L'antenne (s) utilisé pour cet émetteur doit être installé pour fournir une distance de séparation d'au moins [X] cm de toutes les personnes et ne doit pas être co-localisées ou opérant en conjonction avec une autre antenne ou émetteur. Les utilisateurs et les installateurs doivent être fournis avec des instructions d'installation de l'antenne et des conditions de fonctionnement de l'émetteur pour satisfaire la conformité aux expositions RF.

(Fabricants doit fournir une valeur de [X])

European Union Declaration of Conformity Statement

We, Advantech, declare under our sole responsibility that the product, model, is in conformity with all applicable essential requirements Necessary for CE marking, following the provisions of the European Council Directives 2004/108/EC (EMC Directive), 2006/95/EC (Low Voltage Directive), 1999/5/EC (Radio and Telecommunications Terminal Equipment Directive) and 2011/65/EU (ROHS Directive).

The product is properly CE marked demonstrating this conformity and is for distribution within all member states of the EU with no restrictions.

This product follows the provisions of the European Directives 2004/108/EC, 2006/95/EC, 1999/5/EC and 2011/65/EU.

Čeština Tento výrobek odpovídá požadavkům evropských směrnic 2004/108/EC, 2006/95/EC, 1999/5/EC a 2011/65/EU.

Dansk Dette produkt er i overensstemmelse med det europæiske direktiv 2004/108/EC, 1999/5/EC, 2006/95/EC & 2011/65/EU.

Dutch Dit product is in navolging van de bepalingen van Europees Directief 2004/108/EC, 1999/5/EC, 2006/95/EC & 2011/65/EU.

Eesti Antud toode vastab Euroopa direktiivides 2004/108/EC, ja 2006/95/EC ja 1999/5/EC ja 2011/65/EU kehtestatud nõuetele.

Suomi Tämä tuote noudattaa EU-direktiivin 2004/108/EC, 1999/5/EC, 2006/95/EC & 2011/65/EU määräyksiä.

Français Ce produit est conforme aux exigences de la Directive Européenne 2004/108/EC, 1999/5/EC, 2006/95/EC & 2011/65/EU.

Deutsch Dieses Produkt entspricht den Bestimmungen der Europäischen Richtlinie 2004/108/EC, 1999/5/EC 2006/95/EC & 2011/65/EU.

Ελληνικά Το παρόν προϊόν ακολουθεί τις διατάξεις των Ευρωπαϊκών Οδηγιών 2004/108/EC, 1999/5/EC, 2006/95/EC και 2011/65/EU.

Magyar E termék megfelel a 2004/108/EC, 1999/5/EC, 2006/95/EC és 2011/65/EU Európai Irányelv előírásainak.

Icelandic Þessi vara stenst reglugerð Evrópska Efnahags Bandalagsins númer 2004/108/EC, 2006/95/EC, & 2011/65/EU.

Italiano Questo prodotto è conforme alla Direttiva Europea 2004/108/EC, 1999/5/EC, 2006/95/EC & 2011/65/EU.

Latviešu Šis produkts atbilst Eiropas Direktīvu 2004/108/EC, 1999/5/EC, 2006/95/EC un 2011/65/EU noteikumiem.

Lietuvių Šis produktas atitinka Europos direktyvų 2004/108/EC, 1999/5/EC, 2006/95/EC, ir 2011/65/EU nuostatas.

Malti Dan il-prodott hu konformi mal-provvedimenti tad-Direttivi Ewropej 2004/108/EC, 1999/5/EC, 2006/95/EC u 2011/65/EU.

Norsk Dette produktet er i henhold til bestemmelsene i det europeiske direktivet 2004/108/EC, 1999/5/EC, 2006/95/EC & 2011/65/EU.

Polski Niniejszy produkt jest zgodny z postanowieniami Dyrektyw Unii Europejskiej 2004/108/EC, 1999/5/EC, 2006/95/EC i 2011/65/EU.

Portuguese Este produto cumpre com as normas da Diretiva Europeia 2004/108/EC, 1999/5/EC, 2006/95/EC & 2011/65/EU.

Español Este producto cumple con las normas del Directivo Europeo 2004/108/EC, 1999/5/EC, 2006/95/EC & 2011/65/EU.

Slovensky Tento produkt je v súlade s ustanoveniami európskych direktív 2004/108/EC, 1999/5/EC, 2006/95/EC a 2011/65/EU.

Slovenščina Izdelek je skladen z določbami evropskih direktiv 2004/108/EC, 1999/5/EC, 2006/95/EC in 2011/65/EU.

Svenska Denna produkt har tillverkats i enlighet med EG-direktiv 2004/108/EC, 1999/5/EC 2006/95/EC & 2011/65/EU.

Türkçe Bu ürün, Avrupa Birliği'nin 2004/108/EC, 1999/5/EC, 2006/95/EC ve 2011/65/EU yönergelerine uyar.

European Union:

The low band 5.15 -5.35 GHz is for indoor use only.



■ This symbol on the product indicates compliance with Directive 2002/96/EC (WEEE). Do not dispose of product in unsorted municipal waste.

Please recycle this product in a responsible manner. Refer to local environmental regulations for proper recycling; do not dispose of product in unsorted municipal waste.

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Chapter 1

Introduction

This Chapter briefly introduces the UTX-3115 product.

1.1 Overview

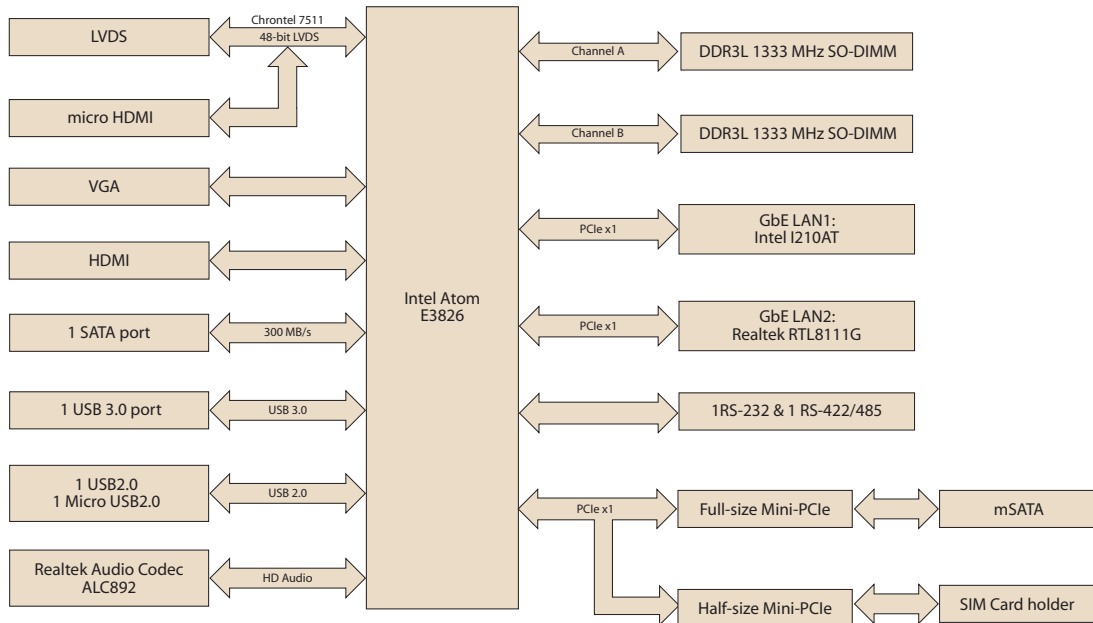
Advantech UTX-3115 system is a refreshingly new idea. Essentially what Advantech have created is an ultra compact PC standard that we want to be the future of computing. Advantech UTX-3115 is an intelligent and impressive small device for small spaces or anywhere else you can imagine. Since low power and small Intel CPUs have come quite a long way, UTX-3115 is designed with the latest Intel SOC which has lower power consumption but with higher CPU performance. The benefit for customer in UTX-3000 is quiet operation and wide temperature system and is open to a large range of applications and markets. UTX-3000 target market is generated in the digital signage, media-centre PCs, as well as all-in-ones, and Intelligent vending machine. At present the mini-pc market has boomed with ARM-powered Android based machines. If you are a windows user, then it's good news for you because UTX-115 small system is based on the shelf Intel components and is capable of running Linux or Windows.

Benefits:

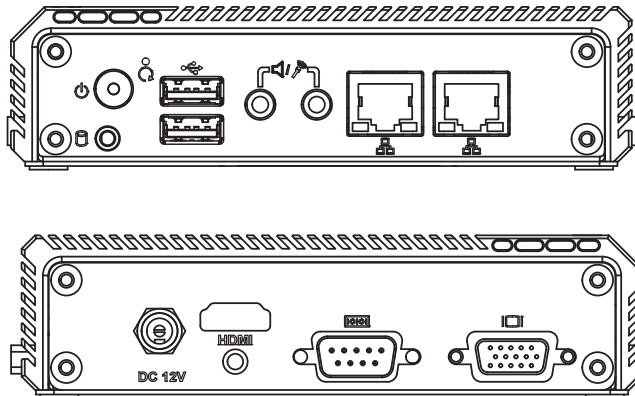
- Ultra Thin Mini-ITX embedded system with CE/FCC certification
- Fanless, Wide-temperature with high performance and flexibility
- Independent displays supported (HDMI, micro HDMI, LVDS)
- One-Stop Integrated Solution: Integrated ultra compact motherboard, chassis, peripherals and software
- Dimensions: 116 x 141 x 35 mm (4.6 x 5.6 x 1.4 in")

1.2 System Configuration

The following diagram is a block drawing of the UTX-3115.



Button I/O arrangement:



Chapter 2

Hardware Description

This Chapter describes the hardware features of the UTX-3115.

2.1 General Specifications

2.1.1 Standard PC Functions

- **CPU:** Intel ATOM e3826 1.46GHz
- **BIOS:** AMI EFI 16bit
- **Memory:** DDR3L SODIMM 1066/1333MHz up to 8GB
- **Audio:** HD audio codec ALC892
- **LAN:** PCI-E gIGABIT Ethernet controllers x2
LAN1: Intel i210AT; LAN2: RTL8111G
- **Universal serial bus (USB) port:** 1 USB3.0/1 USB2.0/ 1 Micro USB2.0, 3 ports for external I/O
- **Mini PCI-E bus expansion slot:** 1 F/S miniPCIE support mSATA/3G card; 1 H/S miniPCIE support WIFI card
- **Storage housing:** 1 2.5" slim SSD
- **Audio:** Mic-in, Line-out
- **LAN:** Gigabit LAN x 2

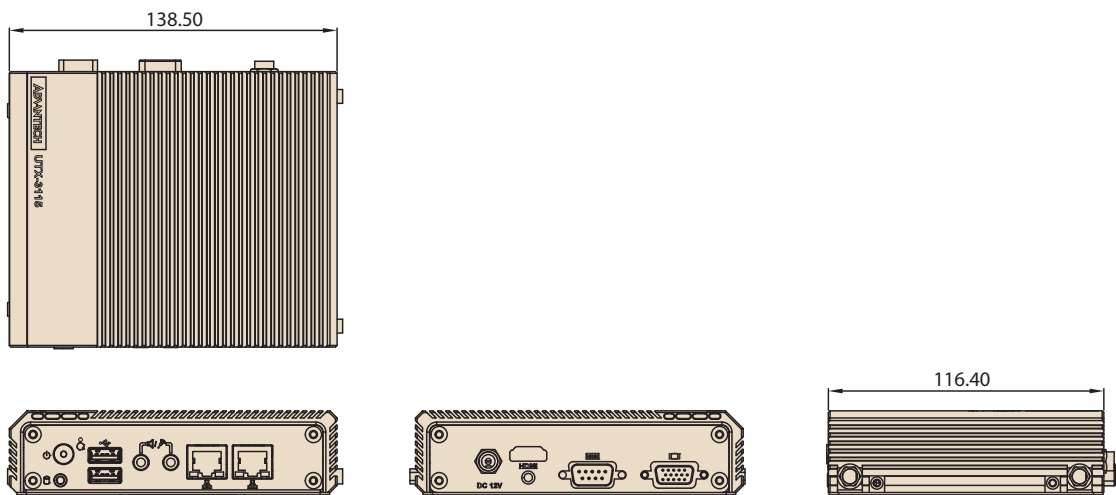
2.1.2 Power Environmental

- **Power adaptor:** AC/DC
 - Input voltage: 100 Vac ~ 240 Vac
 - Output voltage: 12 V @ 3 A

2.2 Mechanical Specifications

2.2.1 Mechanical Specifications (Terminal)

- **System Dimensions:** 138.5 x 35.98 x 116.4 mm (5.5" x 1.4" x 4.6")



- **Carton Dimensions:** 255 (L) X 235 (W) X 160 (H) mm
- **Gross Weight:** 2.0 kg
- **Net Weight:** 1.8 kg

Chapter 3

Design Requirements

This Chapter describes the design requirements of the UTX-3115.

3.1 Environmental Specifications

Temperature & Humidity

- **Operating Temperature:** -20 ~ 60° C
- **Storage Temperature:** -40 ~ 60° C
- **Relative Humidity:** 40 ~ 95% RH (Non-condensed)

Safety

- CE / UL

EMI

- FCC class B approved for USA, Canada, and EU

Vibration:

- With SSD: 3Grms, 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis

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Please verify specifications before quoting. This guide is intended for reference purposes only.

All product specifications are subject to change without notice.

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