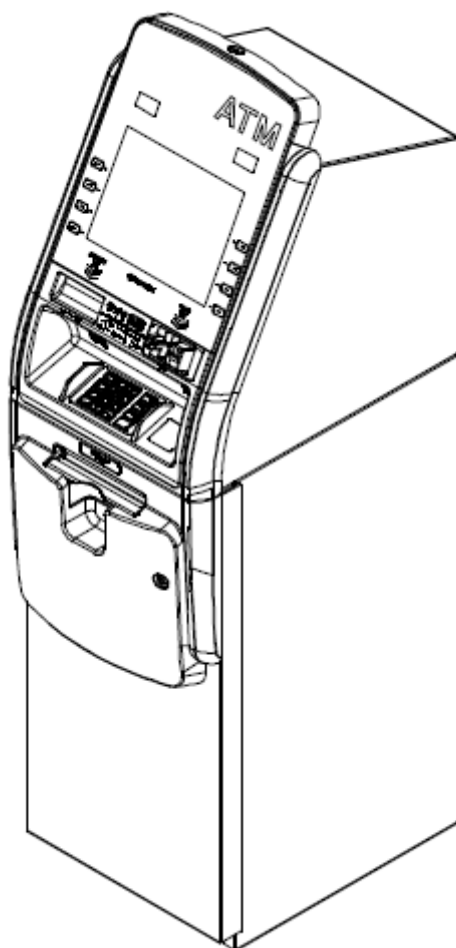


# Installation Manual

## MONiMAX2800SE System

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V01.00.00 (2018. 03. 09)



# Revision History

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## Installation Manual – MX2800SE System

No.	Version	Date	Description of Change	Chapter
1	V01.00.00	2018/03/09	New Publication	All

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## Chapter1. Preface

### Purpose

- ▶ This manual is produced to provide the guidelines for installers to comply with while installing it.
- ▶ This manual describes how to prepare for and to proceed the installation of MX2800SE in advance.

### Audience

- ▶ This manual is for persons related to installing MX2800SE in branches of banks, such as designers and construction workers of the branches and ATM installers, to work efficiently and conveniently.

### Support Information

- ▶ If any question or installation error occurs while preparing for and installing MX2800SE in compliance with this manual, please contact maintenance staffs of Nautilus Hyosung. For the contact of maintenance staffs of Nautilus Hyosung, see the E-mail addresses and telephone numbers provided separately.

### What is in This Manual

- ▶ MONiMAX referred to as “MX”
- ▶ This manual is designed to provide the installation guide for the MX2800SE and the detailed description of the following:
  - Important Warnings
  - Information for installation
- ▶ All measurements in this manual are in inch scale with metric provided in braces [ ].
- ▶ All information described in this manual is a licensed product of Nautilus Hyosung.

Some of the information in this manual may differ according to the network processor to be connected and may be subsequently updated by the bank's needs or the improvement by Nautilus Hyosung .

It is the policy of Nautilus Hyosung Inc. to improve products as new technology,

components, software, and firmware become available. Therefore Nautilus Hyosung reserves the right to change specifications without notice.

## Terminologies

- ▶ In this document the terminology listed below is used as follows:
  - Customer and consumer refer to any person who transacts business through the ATM.
  - Device and unit refer to the standard and optional ATM equipment, such as monitor, card reader, printer and dispenser.
  - Fascia refers to the entire front portion of the unit, including the portion where the customer transacts business.
  - Module refers to a plug-in device that can be serviced or replaced.
  - Note(s) and bill(s) refer to the individual documents loaded into and dispensed from the dispenser.
  - Servicing and maintenance refer to the supervisor, operator and technician's tasks performed to keep the ATM operational.
  - Screen refers to the text appearing on the customer display.

## Abbreviations of ATM

- ▶ In this document the abbreviations listed below is used as follows:

#	Abbreviations	Description
1	AD board	Analog to Digital conversion Board
2	ADA	The American Disabilities Act
3	AP	Application Program
4	Assy	Assembly
5	BATT S/W	Battery Switch
6	CAM	Camera Unit
7	CDU	Cash Dispenser Unit
8	CE	Control Electronics
9	Earphone Jack	Voice Converter for Visually Disabled Persons (ADA)
10	EMV	Europay, Mastercard, Visa
11	EP	Elementary Program
12	EPP	Encryption PIN Pad
13	H/W	Hardware
14	I/F	Interface
15	ISO	International Standard Organization
16	JPR	Journal Printer

#	Abbreviations	Description
17	LCD	Liquid Crystal Display
18	MCU	Magnetic Card Unit
19	OPL	Operation Panel for Customers to Operate
20	OSD board	On Screen Display Board
21	P/S	Power Supply
22	PIN	Personal Identification Number
23	PNC	Panel Control Board
24	PTR	Printer (mainly Receipt Printer)
25	S/W	Switch
26	SIU	Sensor and Indications Unit
27	SP	Service Provider
28	SPR	Slip Printer (Receipt Printer)
29	TTU	Text Terminal Unit (OPL or SPL)
30	VFD	Vacuum Fluorescent Display

## Safety Precautions (English)

▶ Common Safety Precaution



Precautions outlined this manual provide information on safe and proper handling of the product. Non-compliance of the precautions may result in injury or damage to the product. This precaution symbol with sample term tells you safety warnings during equipment handlings.






- ▶ Please read the following instructions before operating equipment.
  - Operate equipment in the order outlined in this manual.
  - Follow precautions indicated in this manual, as well as the equipment itself. Failure to properly address these precautions may lead to injury or damage to the product.
  - Avoid operations not addressed in this manual.
  - If you cannot remedy system problems using the methods outlined in this manual, please refer to contact information listed in the manual.
  - Any change or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

**<Note!>**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

▶ Description of Precaution Symbols

Symbol	Description
	<p><b>Electrical Shock Warning</b></p> <ul style="list-style-type: none"> <li>▪ Do not remove cover. Only a maintenance engineer is allowed to open the cover.</li> <li>▪ Do not touch. You may receive electric shock.</li> <li>▪ Make sure to turn off the power when servicing the equipment.</li> </ul>
	<p><b>High Temperature Warning</b></p> <ul style="list-style-type: none"> <li>▪ Do not touch the equipment when it is running.</li> <li>▪ The equipment can get extremely hot and may cause a burn.</li> <li>▪ Make sure to close the cover before running the equipment.</li> </ul>

	<p><b>Use Precaution when Moving</b></p> <ul style="list-style-type: none"> <li>▪ The equipment is heavy. Make sure at least 2 people lift or move the equipment.</li> <li>▪ Do not attempt to move the equipment alone. You may be injured from dropping the heavy equipment.</li> </ul>
	<p><b>Fire Hazard</b></p> <ul style="list-style-type: none"> <li>▪ Place the equipment in an area away from any combustible materials.</li> <li>▪ The equipment may catch on fire from overheating or short circuit of the power supply unit.</li> </ul>
	<p><b>Disassembly Warnings</b></p> <ul style="list-style-type: none"> <li>▪ Do not disassemble or modify the equipment unless you are a certified engineer.</li> <li>▪ Contact the service center for maintenance, adjustments and repairs.</li> <li>▪ Improper disassembly may cause fire or electrical shock.</li> </ul>
	<p><b>Collapse Precautions</b></p> <ul style="list-style-type: none"> <li>▪ Do not place the equipment where the floor cannot sustain the weight of the equipment, or on slanted or unstable surface.</li> <li>▪ Equipment may fall and cause injury or damage.</li> </ul>
	<p><b>Unplug the Equipment</b></p> <ul style="list-style-type: none"> <li>▪ Stop using the equipment immediately if it smokes, emits an unusual smell, makes abnormal sounds, or if liquids or other foreign materials enter the equipment.</li> <li>▪ If the above-mentioned abnormalities occur, immediately turn off the power, unplug the equipment and contact the service center.</li> <li>▪ If you ignore these symptoms, the equipment may catch on fire or cause electric shock.</li> </ul>

**<CAUTION>**

1. TO REDUCE THE RISK OF FIRE, USE ONLY No. 26 AWG OR LARGER TELECOMMUNICATION LINE CORD
2. RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSED OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS
3. FOR PLUGGABLE EQUIPMENT, THE SOCKET-OUTLET SHALL BE INSTALLED NEAR THE EQUIPMENT AN SHALL BE EASILY ACCESSIBLE
4. THE EQUIPMENT IS TO BE SECURED TO THE BUILDING STRUCTURE BEFORE OPERATION



## Précautions pour la sécurité (French)

### ► Précaution générale pour la sécurité



Précautions décrits de ce manuel fournissent des informations sur une manipulation sûre et appropriée du produit. Le non-respect des précautions peut causer des blessures ou endommager le produit.

Ce symbole de précaution avec le terme d'exemple vous indique des consignes de sécurité lors de la manipulation de l'équipement.

### ► Veuillez lire des instructions suivantes avant d'utiliser l'équipement

- Fonctionner l'équipement dans l'ordre indiqué dans ce manuel.
- Suivre les précautions indiquées dans ce manuel, ainsi que l'équipement lui-même. Le défaut de traiter correctement de ces précautions peut entraîner des blessures ou endommager le produit.
- Évitez des opérations non traitées dans ce manuel.
- Si vous ne pouvez pas résoudre des problèmes du système en utilisant des méthodes décrites dans ce manuel, veuillez se référer aux informations de contact figurant dans le manuel, s'il vous plaît.
- Certain changement ou des modifications dans la construction de ce dispositif qui ne sont pas expressément approuvés par la partie responsable de la conformité pourraient annuler l'autorité de l'utilisateur de faire fonctionner l'équipement.



### <REMAQUE!>

Cet équipement a été testé et fondé pour se conformer aux limites pour un équipement numérique de classe A, conformément à la partie 15 des règles FCC. Ces limites sont conçues pour fournir une protection raisonnable contre des interférences nuisibles lorsque l'équipement est utilisé dans un environnement commercial. Cet équipement génère, utilise et peut émettre des fréquences radios et, s'il n'est pas installé et utilisé conformément aux instructions de ce manuel, peut causer des interférences nuisibles aux communications radios.

Le fonctionnement de cet équipement dans une zone résidentielle est susceptible de provoquer des interférences nuisibles dans le cas, l'utilisateur devra corriger ces interférences à ses propres frais.

### ► Description des symboles de précaution

Symbole	Description
	<p><b>Choc électrique</b></p> <ul style="list-style-type: none"> <li>• Ne pas retirer le couvercle. Seul le technicien d'entretien est autorisé à ouvrir le couvercle.</li> <li>• Ne pas toucher. Vous pouvez avoir un choc électrique.</li> </ul>

	<ul style="list-style-type: none"> <li>Assurez-vous d'éteindre l'appareil lors de l'entretien de l'équipement.</li> </ul>
	<p><b>À haute température</b></p> <ul style="list-style-type: none"> <li>Ne pas toucher l'équipement quand il est en marche.</li> <li>L'équipement peut devenir extrêmement chaud et peut provoquer une brûlure.</li> <li>Assurez-vous de fermer le couvercle avant de lancer l'équipement.</li> </ul>
	<p><b>Soyez prudent lors du déplacement</b></p> <ul style="list-style-type: none"> <li>L'équipement est lourd. Assurez-vous d'au moins 2 personnes pour soulever ou déplacer l'équipement</li> <li>N'essayez pas de déplacer l'équipement seul. Vous pouvez être blessés par la chute de l'équipement lourd.</li> </ul>
	<p><b>Risque d'incendie</b></p> <ul style="list-style-type: none"> <li>Placer l'équipement dans une zone éloignée de tous les matériaux combustibles.</li> <li>L'équipement peut s'enflammer de surchauffe ou de court-circuit de l'unité d'alimentation.</li> </ul>
	<p><b>Démontage</b></p> <ul style="list-style-type: none"> <li>Ne pas démonter ou de modifier l'équipement, sauf si vous êtes ingénieur certifié.</li> <li>Contactez le centre de service pour l'entretien, le réglage et la réparation.</li> <li>Le mauvais démontage peut provoquer un incendie ou un choc électrique.</li> </ul>
	<p><b>Tomber</b></p> <ul style="list-style-type: none"> <li>Ne pas placer l'équipement dont le sol ne peut pas supporter le poids de l'équipement, ou sur une surface inclinée ou instable.</li> <li>L'équipement peut tomber et provoquer des blessures ou des dommages.</li> </ul>
	<p><b>Débrancher l'équipement</b></p> <ul style="list-style-type: none"> <li>Cessez d'utiliser l'équipement immédiatement si il fume, émet une odeur inhabituelle, fait des bruits anormaux ou si des liquides ou d'autres matériaux étrangers dans l'équipement.</li> <li>Si les anomalies mentionnées ci-dessus se produisent, éteignez immédiatement la puissance, débranchez l'appareil et contactez le centre de service.</li> <li>Si vous ignorez ces symptômes, l'équipement peut prendre feu ou provoquer un choc électrique.</li> </ul>

**AVERTISSEMENT :**

- POUR RÉDUIRE LES RISQUES D'INCENDIE, UTILISEZ UNIQUEMENT AWG n ° 26 OU LA LIGNES DE TELECOMMUNICATION PLUS GROSSE
- RISQUE D'EXPLOSION SI LA BATTERIE EST REMPLACÉE PAR UN TYPE

INCORRECT. DISPOSER POUR UTILISATION DES BATTERIES SELON LES INSTRUCTIONS

3. POUR LES APPAREILS RACCORDES, LA PRISE DOIT ETRE INSTALLEE PRES D'EQUIPEMENT POUR ÊTRE FACILEMENT ACCESSIBLE
4. L'EQUIPEMENT DOIT ETRE SECURISE A LA STRUCTURE DU BATIMENT AVANT D'UTILISER

## Chapter2. Introduction

### About the MX2800SE

- ▶ The benefits that the MX2800SE provides are as follows.

Removes inconvenience which occurs when bank clerks directly handle cash with customers and relieves workload upon tellers by processing withdrawal of cash automatically.

Allows tellers to calculate and close amount faster than the existing manual calculation.



Allows easy and quick installation and maintenance.

**<Note!>**

The figures/photos/diagrams in this manual are for well understanding therefore they may be different from real machines.

### System Identification Label

- ▶ The System Label below shows the layout of the product identification label which is fixed inside the ATM

<p style="text-align: center;">Model  </p>	
<p>This equipment complies with part 68 of the FCC rules and the requirements adopted by the ACTA                  US:NHIMM00BHMD1000                  AC-REN : 0.0B                  use standard jack : USCO RJ11C</p>	
MODEM COMPLIANCE	SERIAL NUMBER
<u>INTENDED ONLY FOR USE DURING NORMAL BUSINESS HOURS</u>	
<p><b>* WARNING:</b> DISCONNECT POWER PRIOR TO SERVICING!                  FOR CONTINUED FAULT PROTECTION, FOLLOW THE CORRECT VOLTAGE AND CURRENT RATINGS WHEN REPLACING ANY FUSES!</p> <p><b>* AVERTISSEMENT:</b> COUPER LE COURANT AVANT L'ENTRETIEN!                  POUR LA PROTECTION DE DEFAUT CONTINUE, SUIVRE LA TENSION CORRECT ET L'INTENSITE COURANT POUR REMPLACER LES FUSIBLES!</p>	
<p><b>ELECTRICAL INPUT RATINGS:</b>                  Rating : 100-240Vac, 50-60Hz, 2.5-2A</p>	<p><i>Automated Teller Machine Intended only for use during normal business hours</i></p>
 E113753	<p>Complies with                  UL 60950-1                  CSA-C22.2 No. 60950-1                  UL 291</p>
<div style="border: 1px solid black; padding: 2px 5px; display: inline-block;">IC : 4466A-HMD1000</div>	
<p>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 CLASS A DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003.</p>	
<p><b>NAUTILUS HYOSUNG INC.</b></p> <p>Made in China <span style="float: right;">P/N: 5721003024</span></p>	

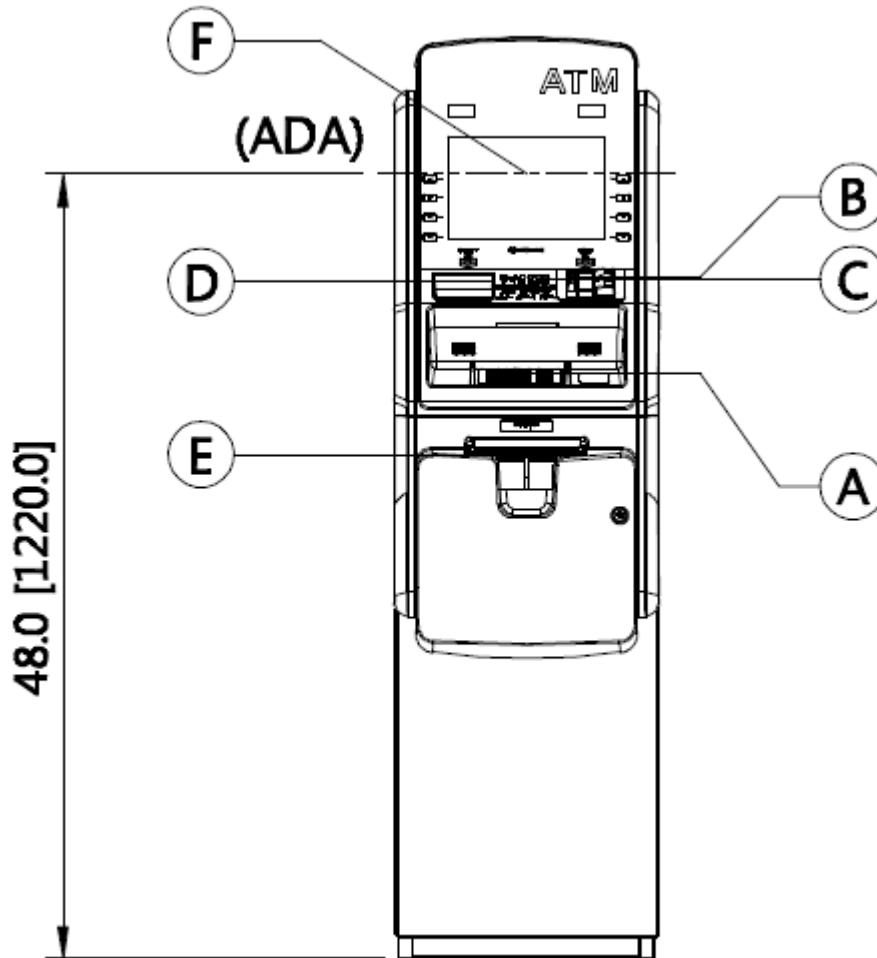
## Chapter3. Installation Information

### Installation Condition and Space

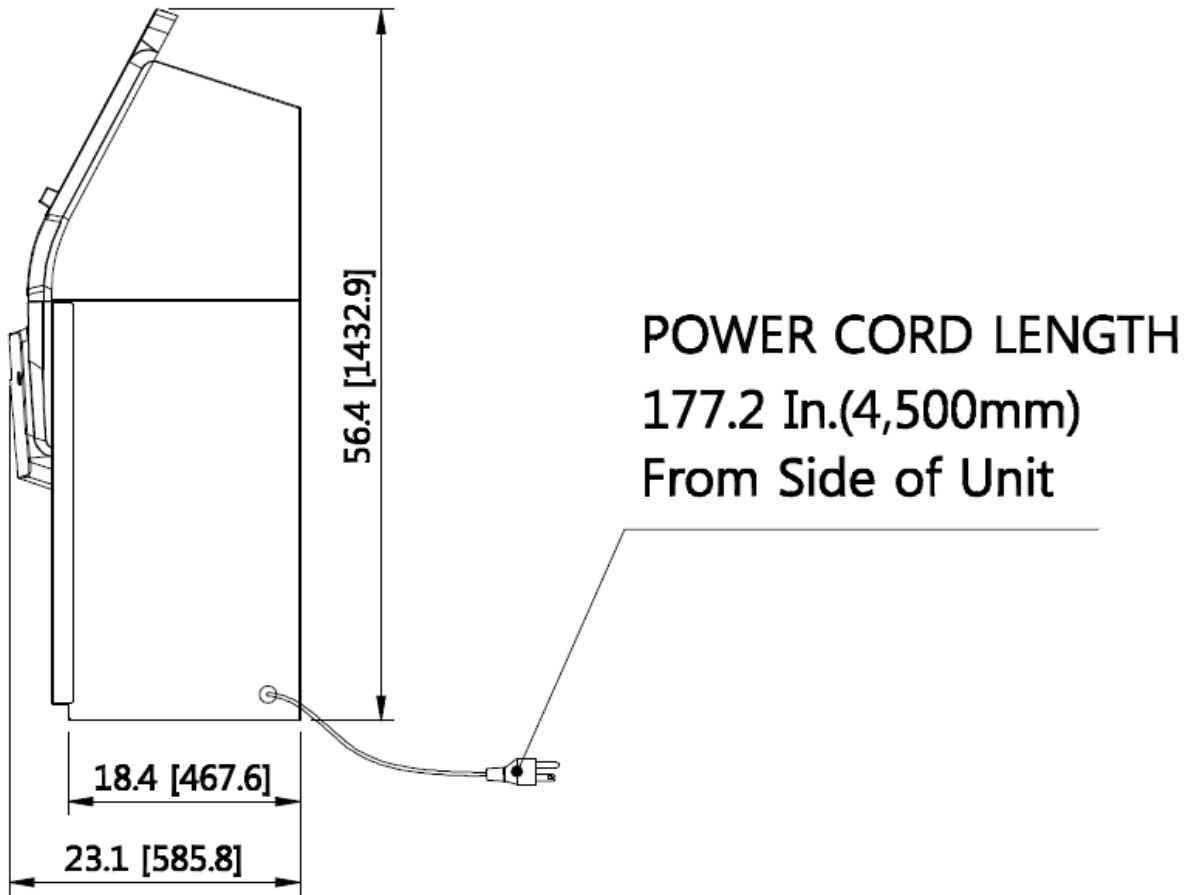
- ▶ When you determine the location of your ATM, ensure that the physical environment, including the temperature and humidity, meets the requirements. Following conditions should be met before installing equipment.
  1. Avoid locations where intense direct sunlight is reflected off the LCD screen.
  2. Avoid locations where strong static electricity can occur.
  3. The ATM should be mounted on concrete or other nonflammable surface only.
  4. The floor must allow easy wheelchair access from the front or the side.
  5. Space required for servicing the machine should be considered before installation..

### Exterior

► Front Elevation

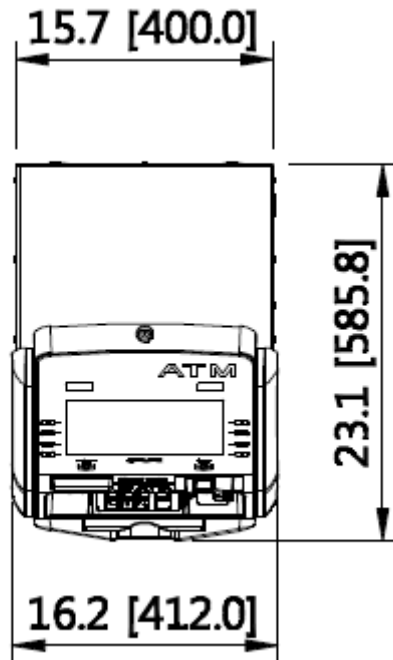


► Side Elevation

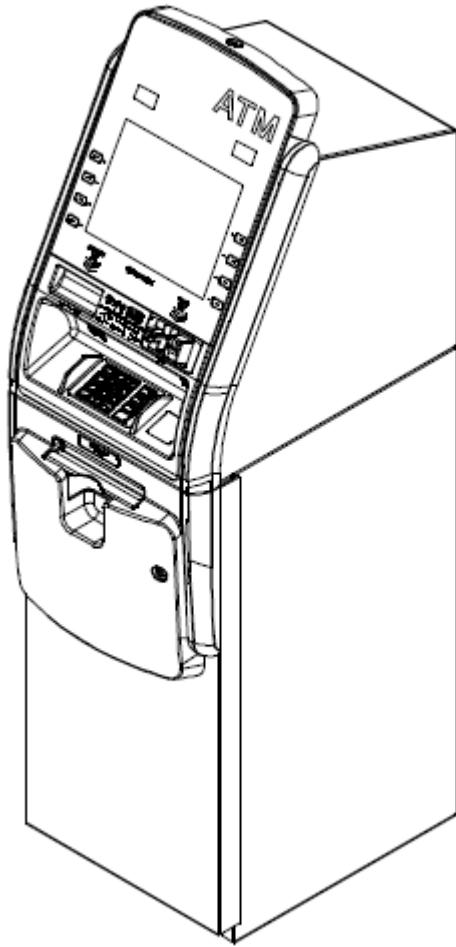




► Plan View

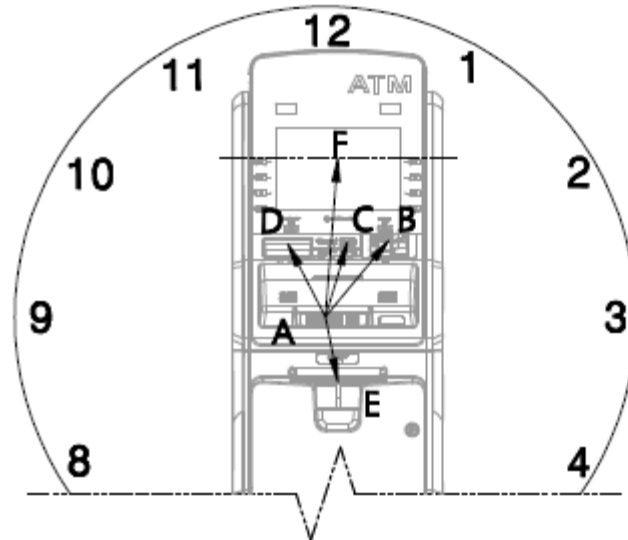


▶ ISO View



## Access For Device

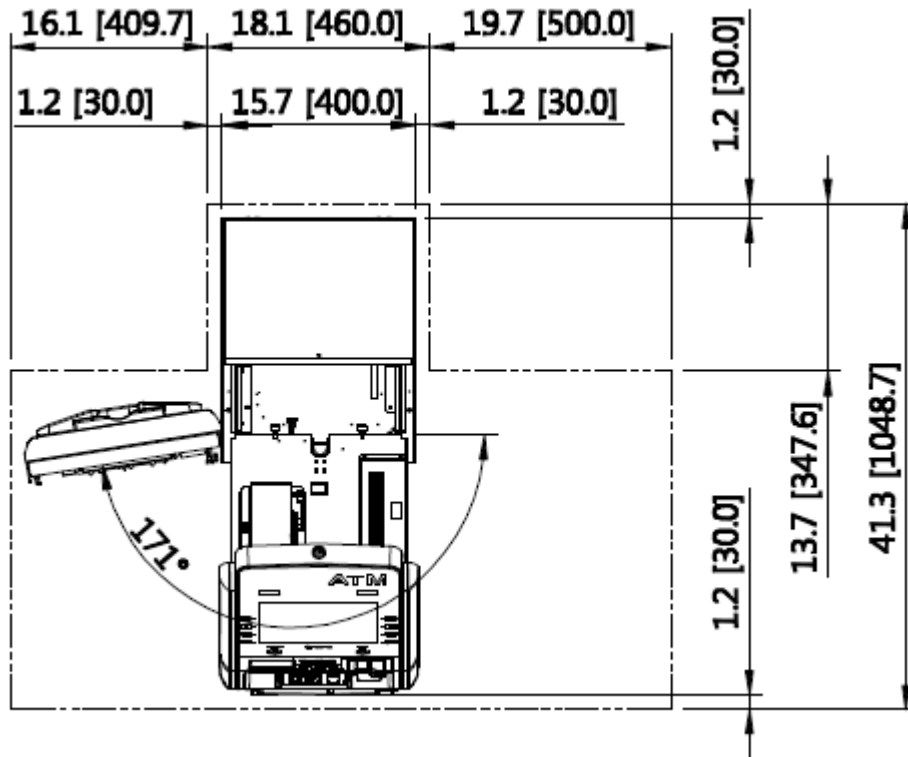
► Access For Device



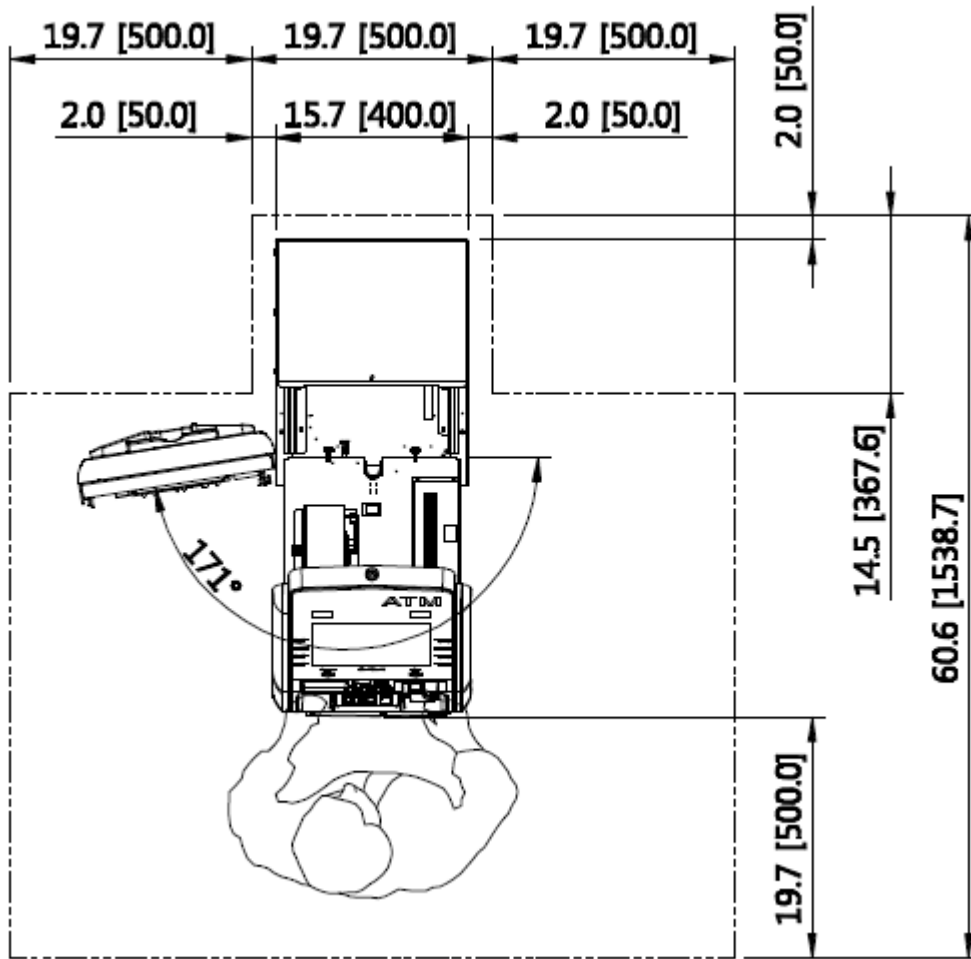
	Device	Height (from base of ATM)	Depth (from front of bezel)	Distance from NFC <3D Distance>	Clock Face Position (Relative to No.5Key)
A	EPP	35.8inch [910.2mm]	3.7inch [92.8mm]	0	0
B	MCU	41.7inch [1059.9mm]	2.7inch [68.1mm]	7.7inch [195.9mm]	1
C	Earphone Jack	41.6inch [1056.2mm]	3.7inch [93.9mm]	6.0inch [152.2mm]	1
D	SPR	41.4inch [1052.5mm]	4.5inch [114.0mm]	6.4inch [161.5mm]	11
E	CDU	30.9inch [783.6mm]	0.6inch [15.2mm]	5.9inch [150.5mm]	6
F	OPL	48.0inch [1220.0mm]	7.1inch [181.0mm]	12.7inch [323.0mm]	12

### Service Area

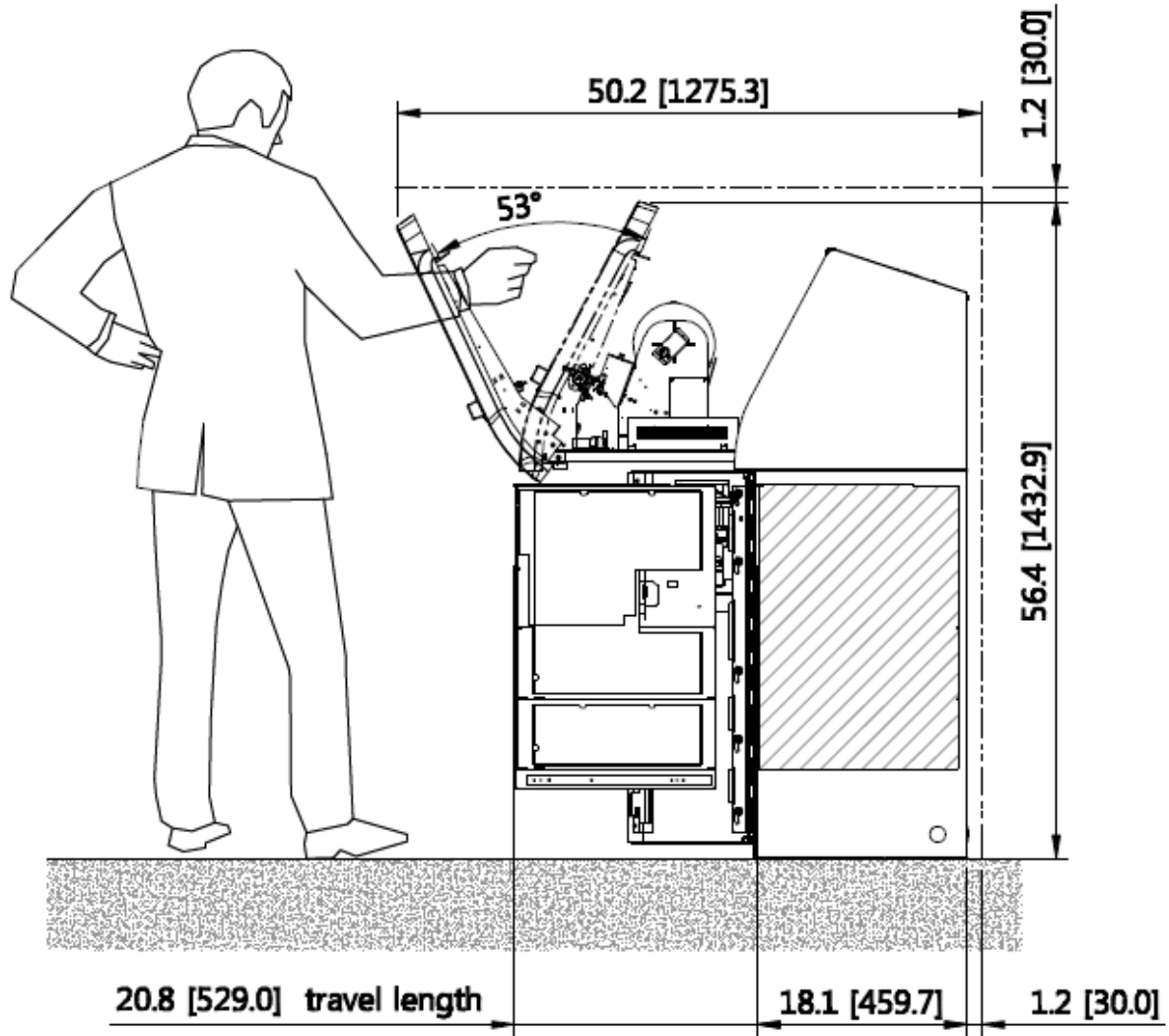
► Minimum Installation



► Recommended Installation



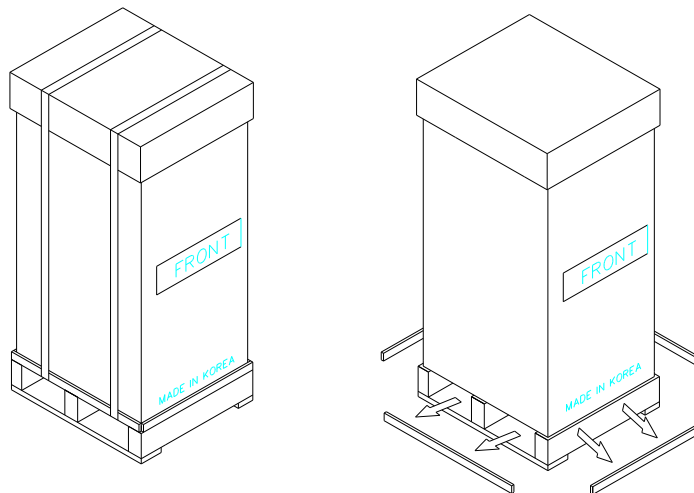
► Side Elevation



## Chapter4. System Installation

### Unpacking the ATM

- ▶ Unpack the machine on top of the palette.
  1. Cut the straps that are fastened around the box with a knife.  
(Be careful when cutting the straps. Refer to figure below.)
  2. Use an appropriate tool to remove the nails from the palette. (Refer to figure below)
  3. Remove the lid, then box from the top. Do not discard the packaging materials until you have verified any shipping damage claim. Contact your distributor immediately if you see any shipping damage. Store the box in a safe place to re-use or discard of appropriately.
  4. Verify the contents carefully with the packing list to be sure all items listed are included. Notify your distributor of any shortages.
  5. If only the palette needs to be removed, lift the whole machine from the bottom and set it aside.



- ▶ Removing equipment from the Palette
  1. Removing bolts from equipment locking bracket.
  2. Removing the Adjustor with a spanner.
  3. Lifting equipment using a lifting device.
  4. Moving this ATM machine to the installation site.

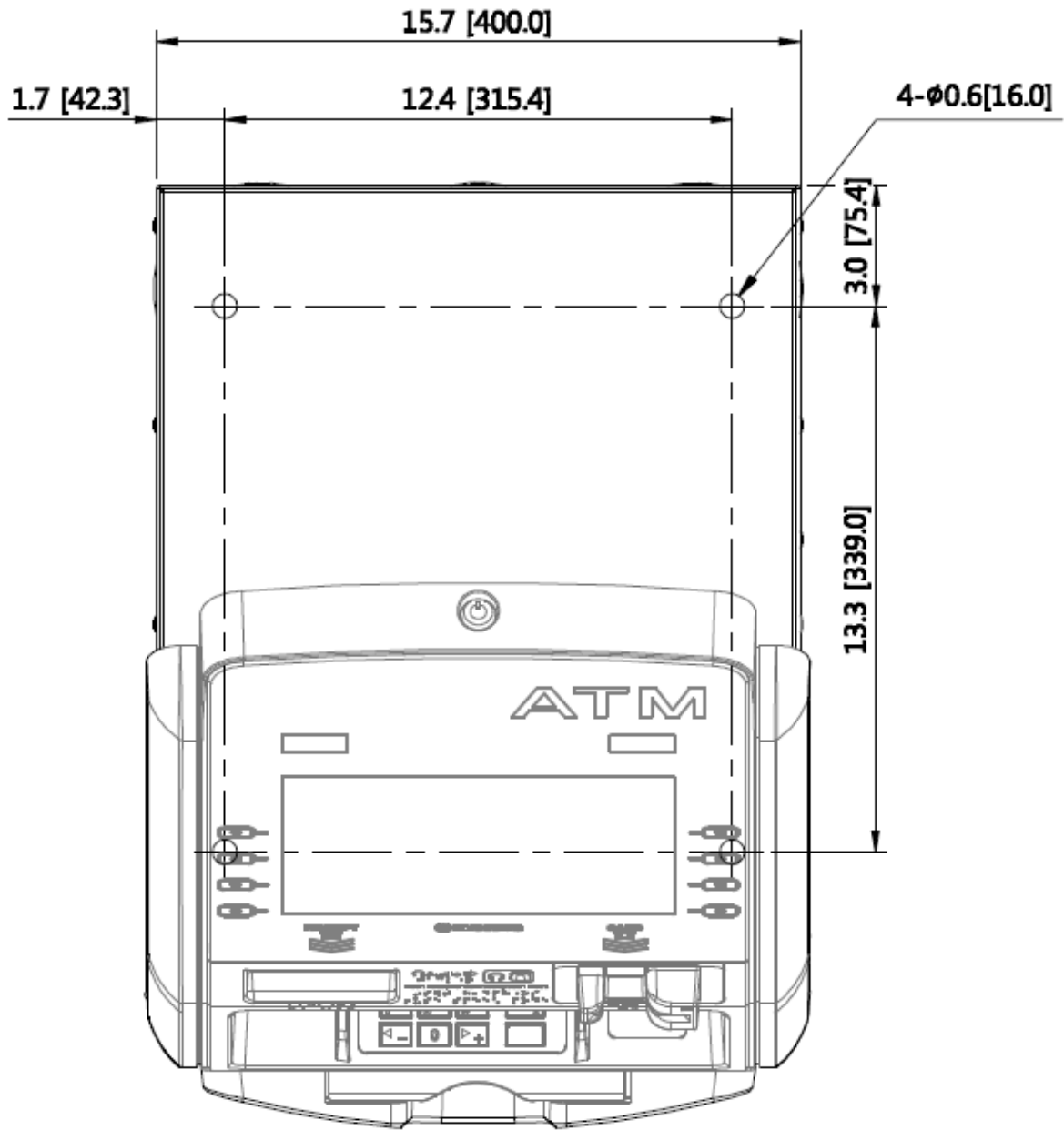
#### PRECAUTION:

MX2800SE ATM machine is very heavy equipment and can cause injuries if not handled with caution. Read the following carefully.

- Firmly close the vault door and lock the door by turning the knob completely.
- Only experienced staff members should move the heavy machine.
- Do not tilt the ATM when moving.

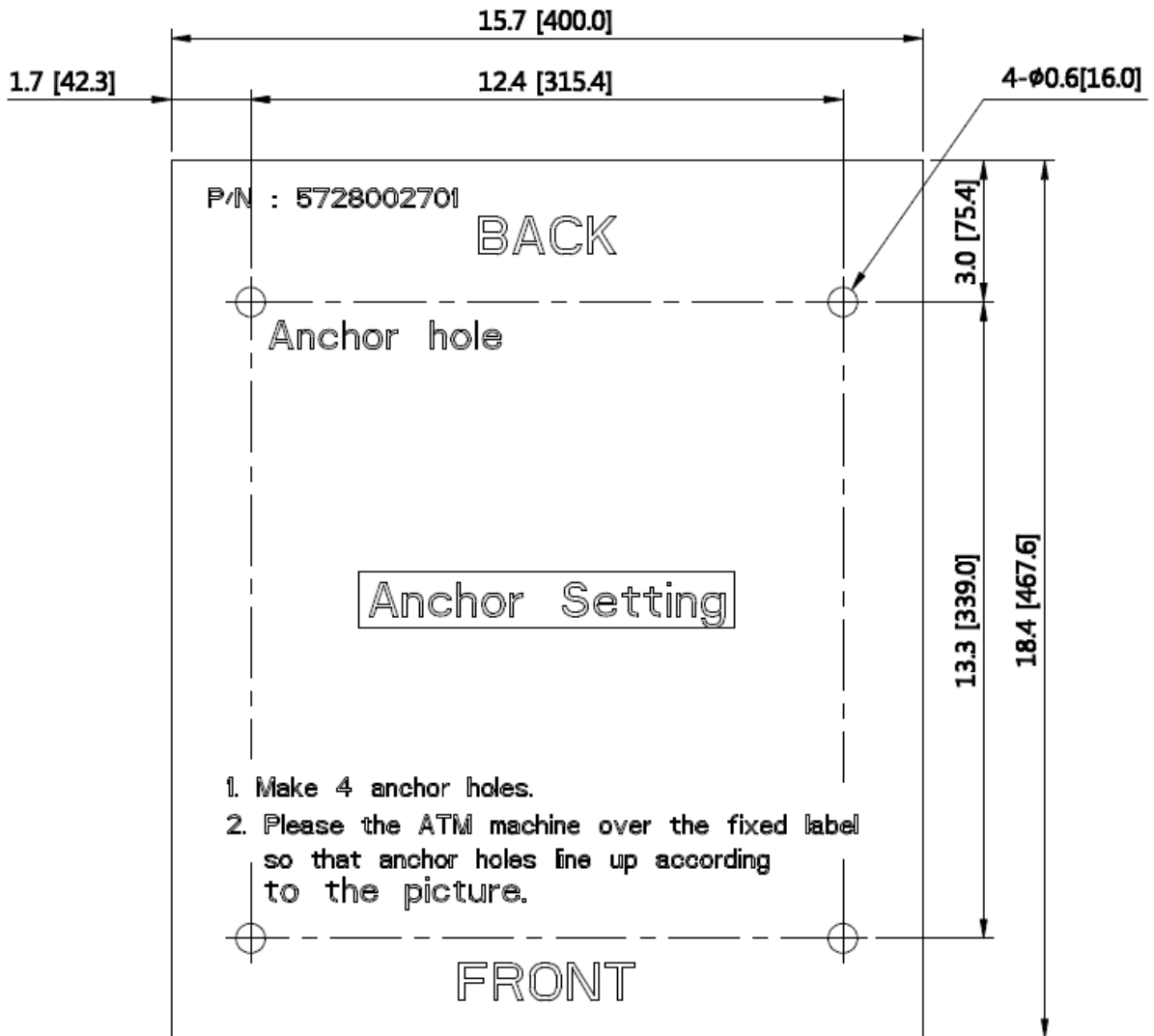
### Installation Frame

▶ Bottom of ATM

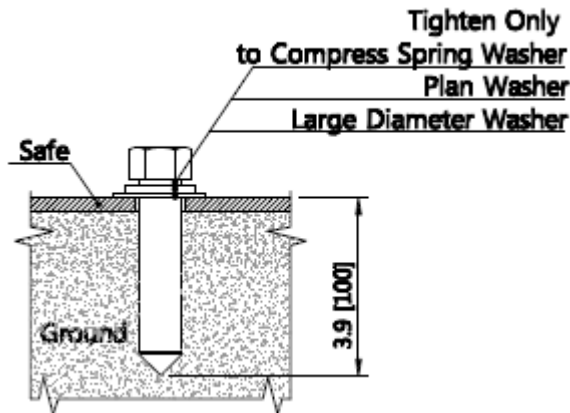




► Anchor Point



► Anchor Detail



### Bolts

- Type-either resin anchor or shield anchor bolts
- Size-1/2 in.(M12)
- Minimum Length-3.9 in.(100mm)
- Strength-high tensile(minimum ISO property class 8.8)

### Washers

- Type-flat,steel(as per DIN7349 or equivalent)
- Size-1/2 in.(M12)
- Outer diameter-no greater than 1.18 in.(30mm)
- Minimum thickness-0.15in.(4mm)

## Power Requirements

### I. The power for the site

- 100~240Vac( $\pm 10\%$ ), Max 3.2A at 50/60( $\pm 3$ )Hz, Single-phase

### II. Power Consumption

- Idle (Min) : 31W
- Transaction (Max) : 150W

### III. Thermal Output

- Idle (Min) : 106 BTU/hr
- Transaction (Max) : 512 BTU/hr

## Notes