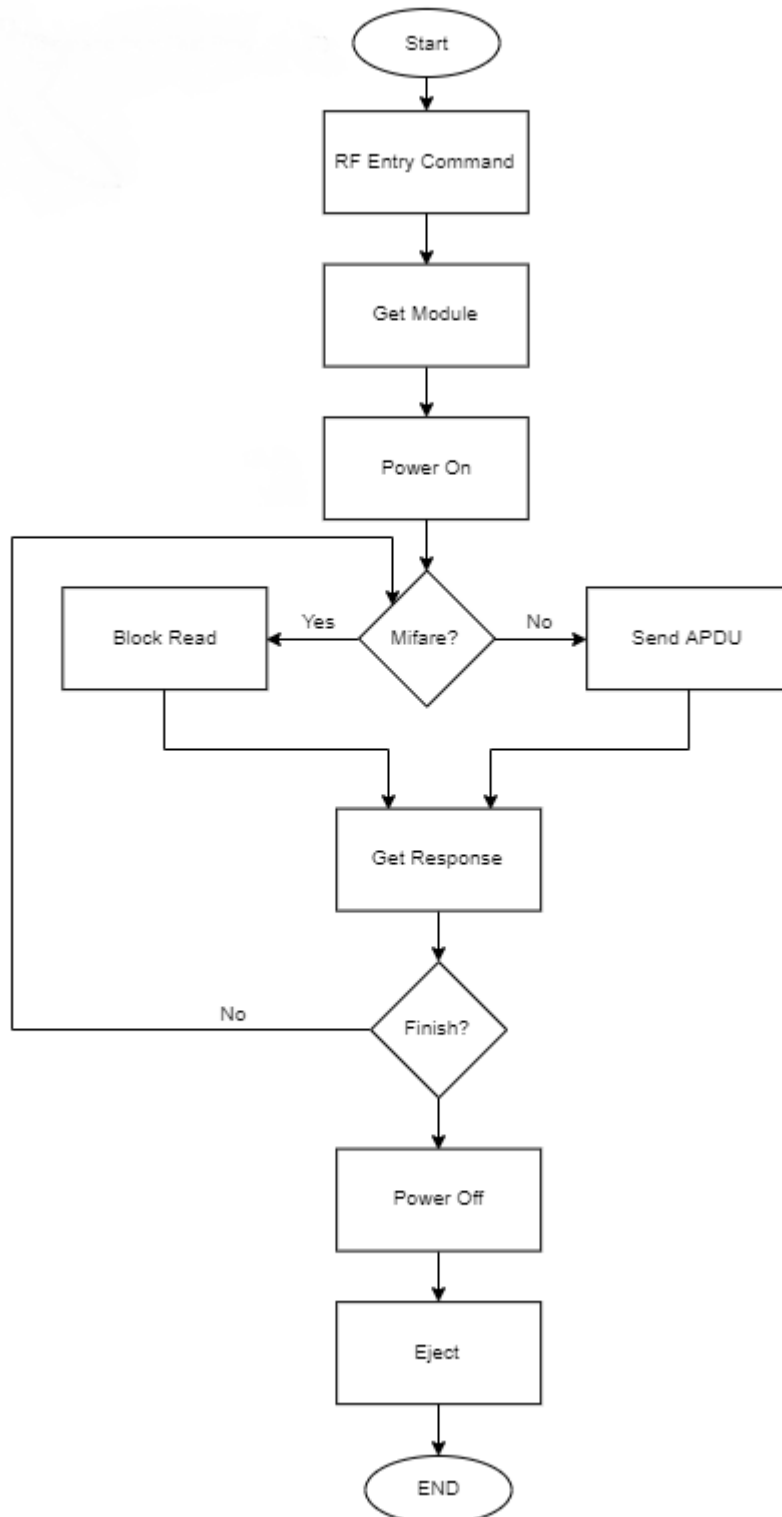


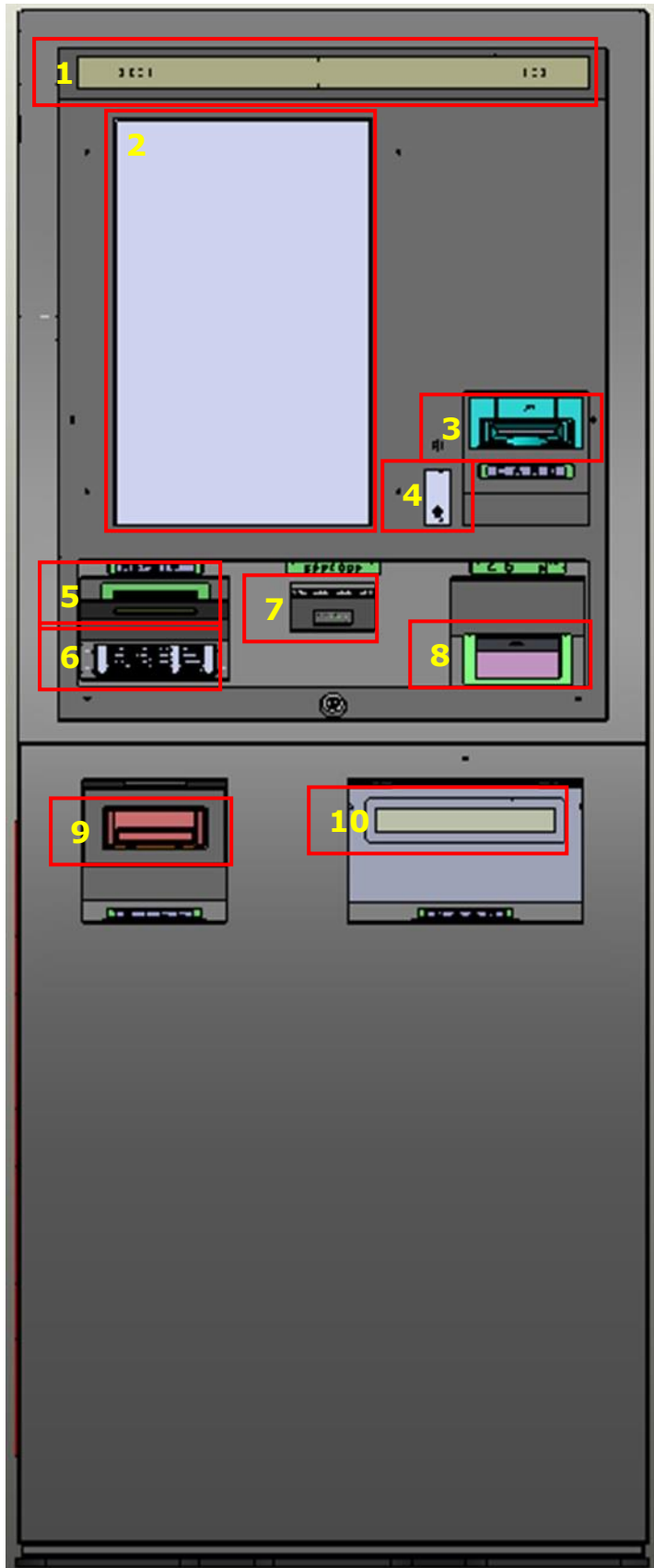
1. Product summary

Universal kiosk EXR can use the RF card to check the availability of the RF ID reader and then deposit and withdraw money at the user's discretion and request a transaction detail sheet for the transaction.

*RF Reader



GK1500EXR User Manual



1. Speaker
 - : Notify by alarm or voice depending on transaction.
 2. Display and Touch screen
 - : Touch the screen to make the desired transaction.
 3. Card slot
 - : Users can use magnetic, ID and RFID.
 4. Earphone
 - : Connect earphone with alarm or voice support.
 5. Transaction Receipt Chart exit
 - : It can be received by user selection.
 6. Encryption Pin Pad
 - : Used to enter user card password.
 7. Barcode
 - : 1D and 2D barcodes are available.
 8. Coin dispenser
 - : Coin withdrawal by transaction.
 9. Bill acceptor
 - : Deposit banknotes as a transaction request
 10. Bill dispenser
 - : Banknote withdrawal by transaction
- This product can be developed by software vendors (os for Linux or Windows)

FCC Information

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

- (1) This Device may not cause harmful interface, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to Part 15 of 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 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 correct the interference by one or more of the following measures:

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

WARNING

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

*CAUTION : Exposure to Radio Frequency Radiation.

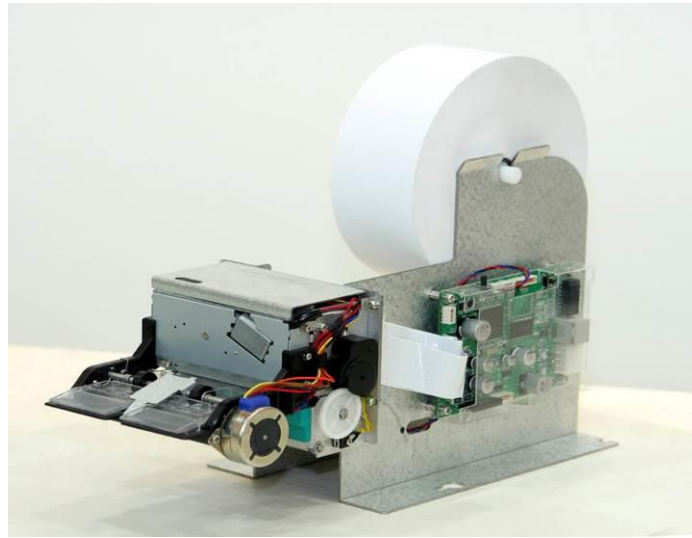
Antenna shall be mounted in such a manner to minimize the potential for human contact during normal operation. The antenna should not be contacted during operation to avoid the possibility of exceeding the FCC radio frequency exposure limit.

2. PC Unit (CU)



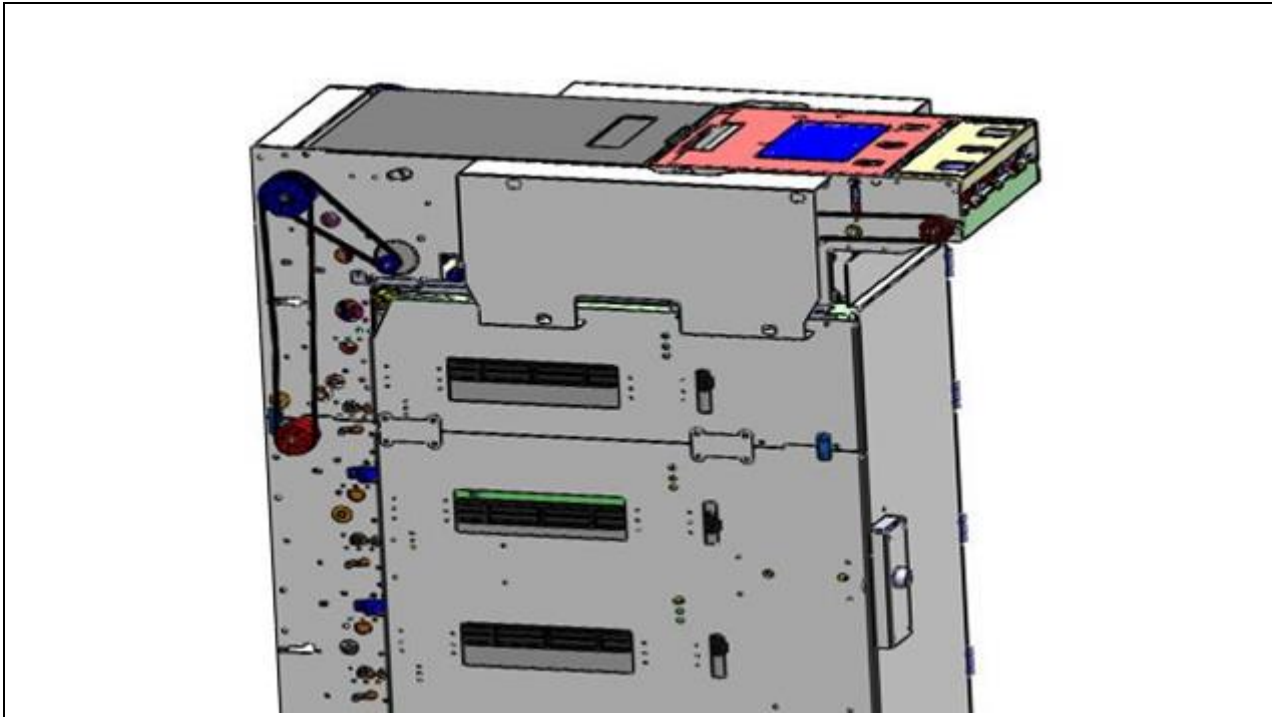
Item	Spec.	Remarks
Processors	Intel® i5 – 3570 3.4GHz	
Chipset	H61	
Memory	DDR3-800/1066 SO-DIMM slot up to 16GB	Default : 4Gbytes
Hard Drive Drives	SSD 250GB	
Optical Disk Drive	None	
Graphics	Intel HD Graphics 2500 series	
Audio Codec	Realtek ALC662 5.1 Channel Audio	
Communication	2*Realtek RTL8111EVL PCI-E Gigabit Ethernet	
Power unit	SH-270(270W) (110/ 220 select support)	
I/O Ports	Serial * 10, Lan *2, USB2.0 *8, HDMI *1, VGA *1 PS2 * 1 Audio *2	
Operating System	Microsoft Windows Professional 7	

3. Receipt Printer (RPU)



Item	Spec.	Remarks
Print type	Thermal Line Printer	
Main CPU	32 bit Cortex-M3	
Memory	64 X 16 bit SRAM	
Input Voltage	-5V (1A) for logic circuitry -24V (2A) for driving motor and thermal head	
Communication	RS232(RJ-45)	Option : USB
Graphic	200 DPI Monographic printing	
Dimension	360(W) X 200(H) X 138(T) mm	
Weight	2.75kg	
Feeding	-Feeding Method: friction -Feeding Speed: Max 150mm/s (Normal 100mm/s, Low 50mm/s) -Feeding Pitch: 0.125mm	
Loading	Semi-automatic paper loading and cutting	
Receipt Paper Roll	-Roll Type: OSC recommended (outside coated) -Roll Diameter: Max 216mm -Width: 76mm -Thickness: 0.110mm or larger recommended (min 0.065mm, max 0.13mm)	
Sensor	Paper out status sensor Black-Mark sensor	

4. Cash Dispenser (CDU)



Item	Spec.	Remarks
Type	Presenter Type	
Maintenance	Front Service Type	
Cassette Capacity	Max. 3,000 notes (New Notes)	0.1mm/new note
Number of Cassette	3 Cassettes	
Reject Capacity	Reject Bin: Max. 200 notes	
Dispensing Speed	4 Bills/sec	
Bills / Transaction	Up to 50 Bills / transaction	
Available Note Size	Max 166mm *79mm / Min 120mm * 60mm	
Near-End Detection	Supported (70 ~ 120 notes)	
Forgotten Retraction	Supported	
External Shutter	Step-motor method	
Double detection	Ultrasonic Sensor	
Controller CPU	32 bit Cortex-M3	
Communication Interface	RS-232C Async	
Power Supply	DC5V, 24V	
Dimension	278 (W) x319 (H) x532 (D)mm	1Cassette
Weight	About 20Kg	

5. Encryption Pin Pad (EPP)



Item	Spec.	Remarks
Overall Dimension	7.20(W) X 3.62(D) X 1.22 (H) inch	183 (W) X 92 (D) X 31 (H) mm
Weight	1.10lbs	500g (Typ.)
Input Voltage	+5V DC ±5%	
Current	80mA	
Communication	RS-232 (38400bps, 8Bit, Nonparty, BCC check)	
CPU	MAXQ1103 secure CPU	
	Access 256kbytes of nonvolatile SRAM for program and/or data storage	
	Encryption using on chip 64/128/196bits key	
	Self Destruct Input (SDI)	
Certification	PCI3.0 certified.	
Algorithm	DES / TDES	
Battery	3.6V / 1200mA for memory data retention power	
	Data backup	

6. MS & IC CARD READER (MCR+RF)



Item	Spec.	Remarks
Card Format	ISO 7810	
MS Standard	ISO 7811(TRACK1,TRACK2,TRACK3) Read Capable Hico/Loco CapableF2F Reading Method 4,000,000 Pass Capable	
CIS	Canon MA06Z-X06	
NFC	Mifare® & ISO-14443A&B,FeliCa,ISO 18092 13.56MHz	
IC	ISO/IEC 7816 EMV2000 ver.4.0 Contact Landing Type	
FEED SPEED	450mm/sec ± 10%	
Interface Type	RS232C Interface	
MS HEAD TRACK WIDTH	Read Track Width : 1.0 mm Write Track Width : 3.0 mm	
SHUTTER	Option : Sensor Only(Not Used)	
INTERFACE	Main Board : RS-232, CIS Board : USB 2.0(High Speed)	
Input voltage	+24Vdc +-10%, 2A Ripple : Less than 200m Vp-p (24V DC)	
Weight	1.66kg	
Dimension	W : 118 x H : 74.5 x L : 271.2	

7. Bill Acceptor



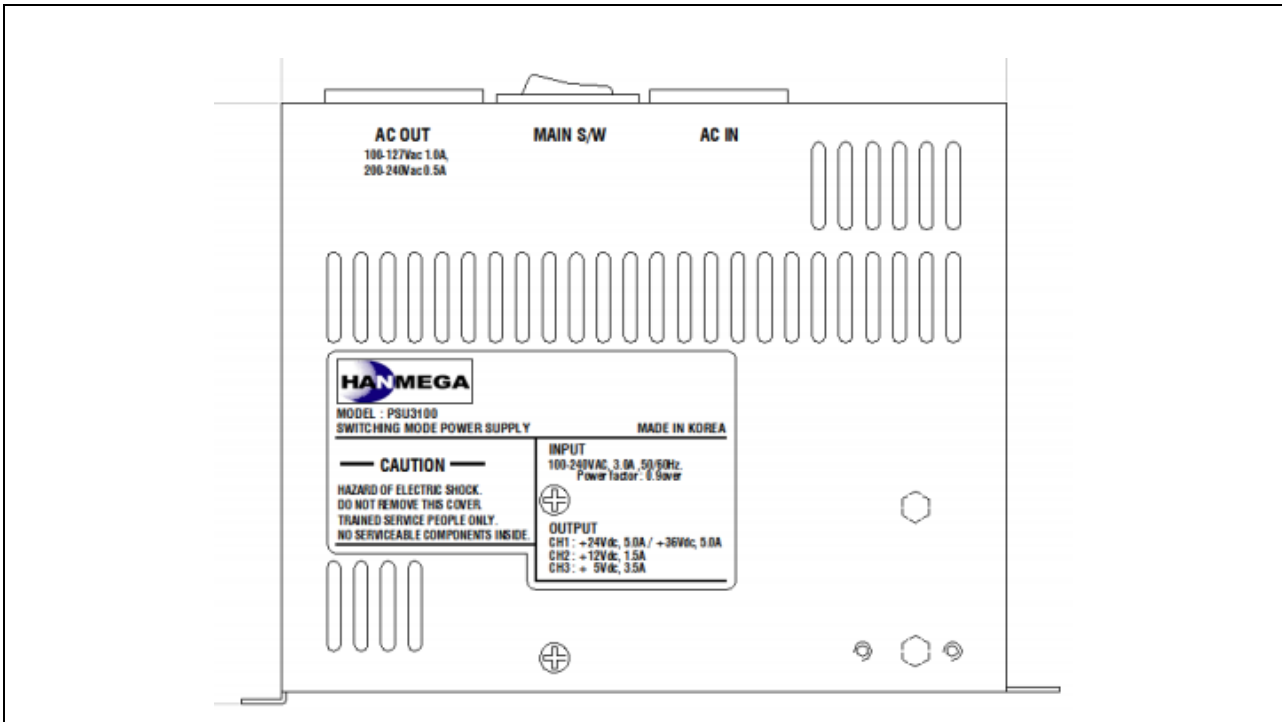
Item	Spec.	Remarks
Acceptance rate	98% or greater	
Note Insertion	Notes – up to 48notes, four ways, face up and down Note dimensions – 62~83mm width 120 ~ 166mm length	
Transaction speed	Approximately three seconds to stack	
Escrow	One note	
Interfaces method	RS232C	
Cashbox capacity	500/900/1200/2200	
Weight	Approximate 4Kg.	

8. LCD



Item	Spec.	Remarks
LCD	Screen Size	21.5 Wide TFT LCD
	Resolution	1920 * 1080
	Active area	296.46(W) x 527.04(H)mm
	Input Key	Capacitive multi touch
Voice Guidance	Voice assisted operation available through the headphone jack on the front bezel	

9. Power supply (PSU : PSU-3100)



Item		Spec.				Remarks
Input	Input Voltage	90~264VAC (Free voltage)				
	Frequency	50/60Hz (47Hz ~ 63Hz)				
	Current	3.5A Max.(100VAC) or 1.8A max. (240VAC)				(Output max. load)
	Efficiency	85% Over (Input: 110/220VAC, Output: Full load)				
	Inrush current	40A max. (At cold start & 110VAC 60Hz)				
Output	Total Watt	215.5W				
	Voltage	5V	12V	24V	36V	
	Current	Min: 0.5A	Min: 0.0A	Min: 0.0A	Min: 0.0A	
		Max: 3.5A	Max: 1.5A	Max: 5A	Max: 3.4A	
		Peak: 4.0A	Peak:2.5A	Peak: 13.0A	Peak: 5A	
	Ripple	50	120	600	360	
Noise	100	240	720	500		
Operating environment	Non Condensing	14°F ~ 104°F, 0 ~ 90% RH				-10℃ ~ 40℃, 0 ~ 90% RH
Overall Dimension		161.6(W)X133.7(H)X 70(D) mm				

10. Barcode



Parameter	Spec.	Remarks
Dimensions	26mm(H) * 73mm(L) * 51mm(W) Weight: 77g	
Wavelength	lumination LED: 633nm	
	Aimer LED: 528nm	
Image Size	844 * 640 pixels	
Skew Angle	±65°	
Pitch Angle	±45°	
Motion Tolerance	Up to 240 inches per second for 13mil UPC	
Enhanced Steaming Presentation Trigger		
Symbol Contrast	Grade 1.0(20% or greater)	
Voltage Requirements	4 ~ 5.5 VDC at input connector	
Current Draw @5VDC	Scanning: 450mA, 2.3W Standby: 90Ma, 0.45W	
Power supply Noise Rejection	Maxium 100Mv peak to peak, 10 to 100kHz	
Temperature Ranges:		
Operating	+32°F to +104°F(0°C to 40°C)	
Storage	-4°F to +158°F(-20°C to 70°C)	
Humidity	5 to 95% non-condensing	
Mechanical Drop	Operational after 30 drops from 4.9 feet (1.5m) to concrete at 23°C	
ESD Tolerance	Up to 15kV direct air Up to 8kV indirect coupling plance	
Solids and Water Protection	IP53	

11. SPL



Item		Spec.	Remarks
LCD	LCD size	8 inch(Diagonal)	
	Driver element	a-Si TFT active matrix	
	Resolution	800 x 3(RGB) x 600	
	Display mode	Normally White, Transmissive	
	Dot pitch	0.0675(W) x 0.2025(H)mm	
	Active area	162.0(W) x 121.5(H)mm	
	Module size	183(W) x 141.0(H) x 5.6(D)mm	
	Surface treatment	Anti-Glare	
	Color arrangement	RGB-stripe	
	Interface	Digital	
	Backlight power consumption	1.674W(Typ.)	
	Panel power consumption	0.356W(Typ.)	
	Weight	241G(Typ.)	

12. Coin Hopper



Item	Spec.	Remarks
Dimensions	150mm(H) * 85mm(W) * 145mm(D)	
Coin Payout	Up to 8coins per second.	
Coin Dimension Range mm	Diameter : 15 to 29.5mm Thickness : 1.25 to 3.2mm	
Operating environment	0°C ~ 60°C, inside host machine	
Power Supply Voltage	12 – 24VDC +/-10%	
Interface	Parallel or Serial(ccTalk)	

13. US local contact information

a. Main Tel.: (510) 344-6333

b. Tech. Support Tel: (510) 344-6344

c. Address: Genmega, Inc. 30587 Huntwood Ave Hayward, CA 94544