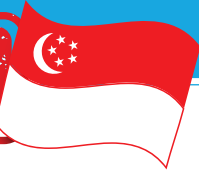


**Designed &  
Built in Singapore**



**HappyIce®**

SMART FROZEN  
VENDING & SOLUTION

# MODEL-F, ICE CREAM FROZEN VENDING MACHINE

Since 2015, Happy Ice has been involved in designing, building, and operating frozen vending machines. With an in-house R&D engineering team, the company has produced a single type of machine model that can

accommodate various types of frozen food, ranging from the most temperature-sensitive products, such as ice cream, to frozen meat/seafood and Ready-To-Eat (RTE) frozen food.

**Ice Cream (-25°C)  
Model-F with LED Light Box  
Up to 16 SKUs (Max 600pcs)**



## General Features:

- Product Menu: 22" LED ultra clear light box, or actual product display box
- Suitable for outdoor use
- MDB compliant
- Cash (bill and coin) and cashless system compatible
- Guaranteed product delivery; if not, no money deduction
- Remote monitoring capability (live-view temperature, sales, inventory etc)
- Purchase-with-Purchase feature: second purchase to enjoy discount
- Available of spoon dispenser and plastic bag dispenser

## Refrigeration

- Energy efficient (80% lower electric consumption than conventional frozen vending machine)
- High efficient refrigerant: R600a
- Auto defrost. During defrost, able to maintain all the time to be below freezing point, to ensure ice cream quality
- 12hrs thermal holding power (during power loss, can hold 12hours to keep ice cream remain safe)

## Model-F Technical Specification

Dimension	720 x 900 x 1980 mm (WxDxH)
Weight	260kg
Total Storage Volume	390 liter
Cooling temperature	-25°C
Rated Voltage	220-240 V~
Rate Frequency	50/60 Hz
Rated Power	205 watt
Rated defrost power	400 watt
Defrost system	Auto-defrost
Rated Current	0.9 A
Startup surge current	6.5 A
Freezing Capacity	18kg / 24H
Refrigerant, Amount	R600a, 50g
Warranty	2 years limited parts
Climate Class	T (16 to 43 °c)
Max sku	Ice cream = 16sku. Frozen food: 8sku
Max capacity	Ice cream = 600pcs, frozen food: 100pcs



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# Machine's components

**Outer view components:**

- 22" LED Ultra Clear Light Box (Product Menu, Best for Outdoor Use)
- Operational Screen
- Keyboard (key-in Product Number)
- Ice Cream Spoon
- Plastic Bag
- 10" Touch Screen (QR payment, Online Redemption, Marketing Video)
- Coin Acceptor
- Cashless Terminal (MDB)
- Bill Validator
- Coin Return

**Inner view components:**

- Actuator Door Controller
- Android Board
- 4G Module
- Dispenser Motor Controller
- Freezer Controller
- Vending Machine Controller

Outer view of the machine. User's interface to purchase product from vending machine

After opening the Outer door, is the location for machine's controller components

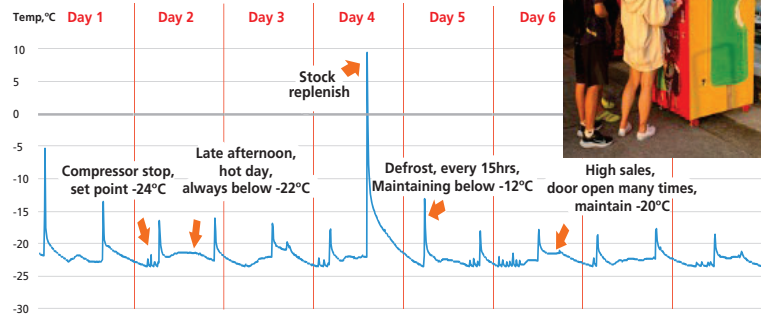
### Live view machine status

Name	Temp1(°C) Δt1-t2	Inventory Status (#Channel, Sold, Balance/Capacity)	Errors	Balance Stock	Remaining SKU#	\$ Sales (qty) Today Y'day Last7d Last30d	Status	
UFI-2331	-24.4 55s ago 0.8	#31, 8, 13/21	#32, 22, 0/22	#33, 0, 15/15			Online 4s ago	
		#34, 11, 4/15	#35, 21, 0/21	#36, 14, 8/22			Drop Sensor Enabled	
		#37, 15, 0/15	#38, 4, 11/15				Fan Speed 4477	
		#41, 6, 4/10	#42, 10, 0/10	#43, 6, 4/10	#63, (9) 230506 06:00pm	133/ 336 (40%)	13/ 19 (68%)	Door Close
		#44, 4, 0/4	#45, 2, 2/4				19.80 (11) 65.40 (22) 292.60(123) 1,002.40(491)	Coin 81.30
		#61, 13, 13/26	#62, 5, 20/25	#63, 21, 4/25				
		#64, 20, 6/26	#65, 8, 17/25	#66, 13, 12/25				

Cloud based live-view on machine status: temperature, inventory, sales, error, Coin & Bill equipment condition  
Fully integrated with NAYAX cashless terminal: Provide pre-defined SMS alarm notification Detail Sales report

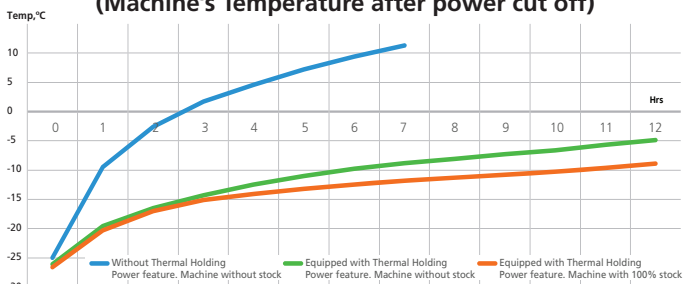
## Temperature (outdoor) Climate class: t (up to 43°C)

### 8 Days Temperature Graph, Machine Under Direct Sunlight



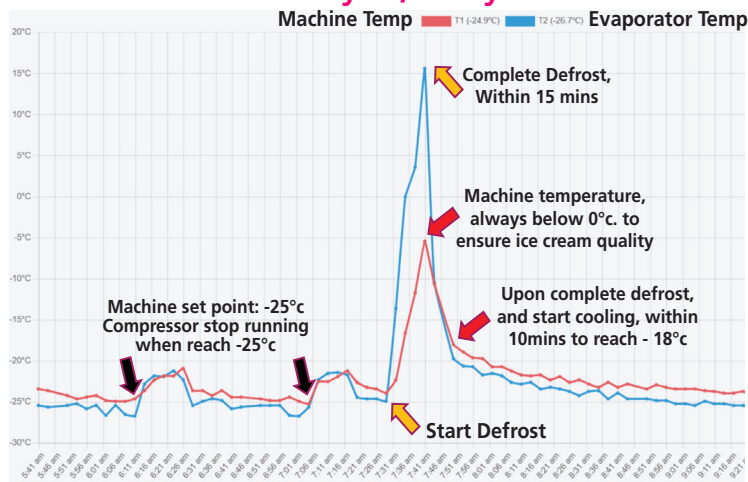
## Thermal holding power

### Thermal Holding Power (Machine's Temperature after power cut off)



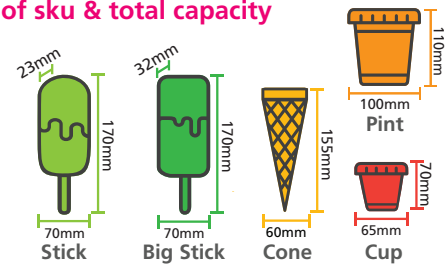
Ice cream temperature would be 2°C to 5°C lower than machine temperature. In the event of loss of electric power, this 12 hours thermal holding power feature, can protect ice cream from melt. This can reduce losses and ensure highest ice cream quality and customer satisfaction

## Auto defrost cycle, every 15hrs



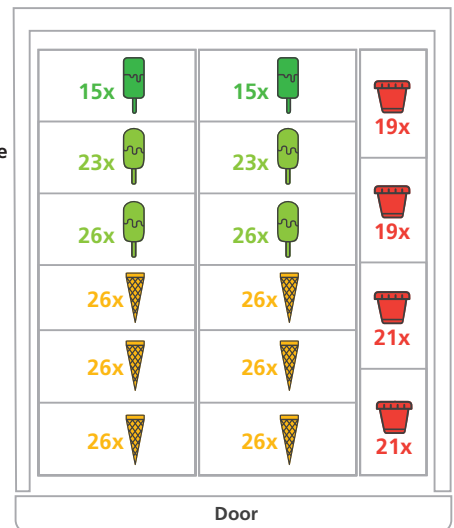
## Customized dispenser rack: Number of sku & total capacity

**Step 1**  
Measure Products Dimension  
Dimension shown is maximum acceptable value



**Step 2**  
Decide number of channel for each type of products. Then customized design and fabricate the dispenser rack

**Example**  
2x Big Stick,  
4x Stick, 6x cone,  
4x cup  
Total : 16 SKU,  
364 pcs



\* Illustration shown as Top View