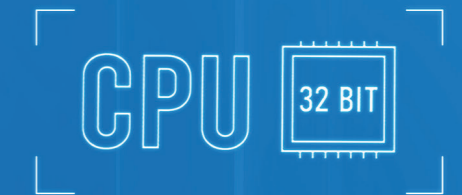# HITACHI
Inspire the Next

MCA
Machine Room Elevator

CPU 32 BIT

HITACHI
Inspire the Next

The information in this catalogue is subject to change without notice. The information and diagram in this catalogue reflect the technical features and configuration of the elevator model at press time (refer to the version number). In line with the principle of continuous development of products, our company reserves the right to change the selection of product technical parameters and colour at any time. The existing image technology cannot accurately reproduce the elevator component structure and decoration colour. Therefore, this catalogue only provides general information, not as a contract document. The specific configuration parameters are subject to the formal agreement.
If you need detailed information, please contact us.

UPGRADE QUALITY FOR THE FUTURE

A warm and beautiful family, a cosy and relax journey, an enjoyable gathering....

Composing a beautiful scene of life.

And in the midst of it, you will always see its presence - an extraordinary elevator of exceptional quality.

Hitachi's CA system elevator boasts an outstanding foundation system, a human-centric and cosy space, and a wide range of solutions that support your quality of life and contribute to your bright future.

CONTENTS

Product Description

Standard Decoration

Solution Centre

DIGITAL AND INTELLIGENT PLATFORM

New generation digital control system, featuring Hitachi's independently developed inverter, boasts a streamlined structure, intelligent efficiency, and incorporates multiple core technologies, comprehensively enhancing the safety and reliability of the elevator.

New generation integrating digital platform, highly intelligent and efficient

Core component pre-diagnosis technology, prevent failures

Intelligent auxiliary brake, improve reliability

New generation dual-medium communication system, provides dual protection

HUMAN FLOW PREDICTIVE ELEVATOR OPERATION
(APPLICABLE WITH FI-700 GROUP CONTROL)

By utilising advance image acquisition and analysis technology, predicting the human flow enables more efficient elevator operation that matches passenger's behavior.
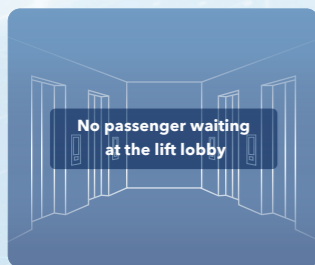
Automatic Hall Call Registration By Sensor Detection

○ Automatic recognition of passenger's position for intelligent hall call operation
○ Reduce waiting times, high efficiency

Passenger's Behavior Trend Prediction

○ Automatic detection of passenger entering and exiting the elevator
○ Intelligent control of door opening and closing

Automatic Cancellation of Hall Call Registration

No passenger waiting at the lift lobby

○ Real-time feedback of passenger situation in the lift lobby
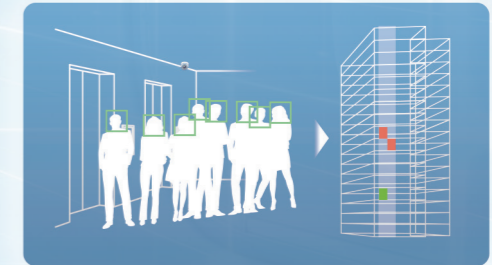○ Hall call is cancelled when there is no passenger

Analysis of Available Space in Car

○ Car space detection analysis
○ Reduce avoidable stops through full-load intelligent travel
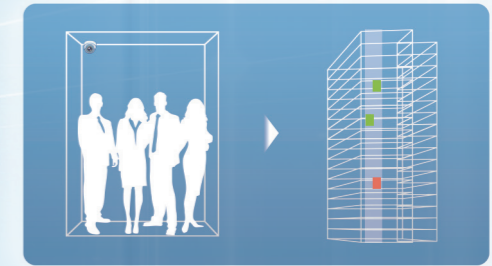
Number of Waiting Passengers Recognition

○ Compute number of awaiting passengers
○ Intelligent dispatching operation

Group Control Human Flow Prediction

○ Real-time human flow monitoring, evenly distribute the elevator calls
○ Predict incoming human flow, dynamic computation of future trajectory
○ Shortens waiting times, reduces rate of long waits

Note: Items with "*", please contact us.

INTELLIGENT AND EXQUISITE CAR

Creating a new aesthetic experience with the All New elevator decoration. Based on the design concept of "LESS IS MORE", simplifying complexity and creating a pure and gentle moving space. Displaying elevator information through graphics and text with real-time voice announcements, providing passengers a user-friendly elevator experience.
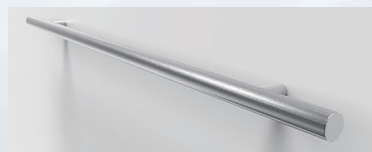
EXQUISITE CAR

Smart Elevator Car, All New Decoration

Create an overall elegant visual effect by introducing contour lighting design.

Ceiling with LED lighting, car walls incorporating stainless steel mirror finish

Stainless steel handrail

Innovative integrated car skirting LED recessed lighting

INTELLIGENT BROADCAST

LCD Display and Voice Announcements

Next 10 Floor

Door Opening

Door Closing

Please press the floor button

This elevator is overloaded. Will the last passenger please use the next lift.

Fire alarm. This elevator will return to the escape floor.

Fire alarm. Please evacuate as soon as the doors are open.

STANDARD
DECORATION

CAR DESIGN (NORMAL CAR)

E-220

Standard

Bare ceiling height	2450mm
False ceiling height	2400mm
Car ceiling	LM-220
	Stainless steel mirror + Painted steel_WP71 (White)
	LED lighting
Car front return panel	Stainless steel hairline
Car transom	Stainless steel hairline
Car door	Stainless steel hairline

Side wall (Front panel)	Stainless steel hairline
Side wall (Center panel)	Painted steel_YM47 (Champagne)
Side wall (Rear panel)	Painted steel_YM47 (Champagne)
Rear wall	Painted steel_YM47 (Champagne)
Car skirting illumination*	LED recessed lighting on both sides
Handrail	AA-Y138, Stainless steel hairline (Handrail at rear wall)
Car floor	S-693 Vinyl flooring

* Applicable with LM-220 ceiling.

CAR DESIGN (NORMAL CAR)

E-220 Stainless Steel Hairline

(Optional)

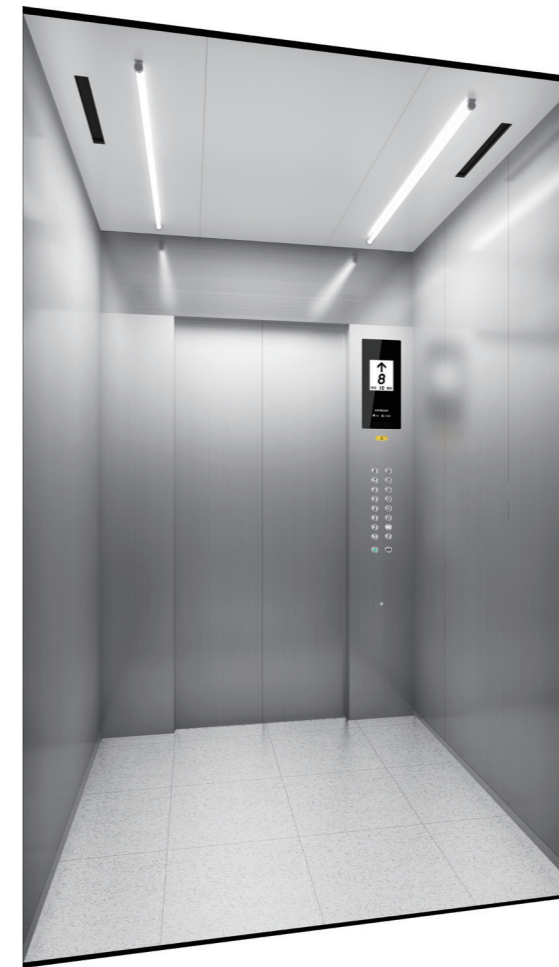| Bare ceiling height	2450mm
False ceiling height	2400mm
Car ceiling	LM-220
	Stainless steel mirror + Stainless steel hairline
	LED lighting
Car front return panel	Stainless steel hairline
Car transom	Stainless steel hairline

Side walls	Stainless steel hairline
Rear wall	Stainless steel hairline
Car skirting illumination*	LED recessed lights on both sides
Car door	Stainless steel hairline
Handrail	AA-Y138, Stainless steel hairline (Handrail at rear wall)
Car floor	S-693 Vinyl flooring

* Applicable with LM-220 ceiling.

CAR DESIGN (NORMAL CAR)

E-71

(Optional)

Bare ceiling height	2450mm
False ceiling height	2450mm
Car ceiling	RF-056
	Painted steel_WN01 (Ivory white)
	LED lighting
Car front return panel	Stainless steel hairline
Car transom	Stainless steel hairline

Side walls	Stainless steel hairline
Rear wall	Stainless steel hairline
Car door	Stainless steel hairline
Car floor	A-26 Vinyl flooring

CAR DESIGN (DEEP / WIDE CAR)

E-220

Deep Car   Standard

Bare ceiling height	2450mm
False ceiling height	2400mm
Car ceiling	LM-220
	Stainless steel mirror + Painted steel_WP71 (White)
	LED lighting
Car front return panel	Stainless steel hairline
Car transom	Stainless steel hairline

Side wall (Front panel)	Stainless steel hairline
Side wall (Center panel)	Painted steel_YM47 (Champagne)
Side wall (Rear panel)	Painted steel_YM47 (Champagne)
Rear wall	Painted steel_YM47 (Champagne)
Car skirting illumination*	LED recessed lights on both sides
Car door	Stainless steel hairline
Handrail	AA-Y138, Stainless steel hairline (Handrail at rear wall)
Car floor	S-693 Vinyl flooring

* Applicable with LM-220 ceiling.

E-220 Stainless Steel Hairline

Deep Car   Optional

Bare ceiling height	2450mm
False ceiling height	2400mm
Car ceiling	LM-220
	Stainless steel mirror + Stainless steel hairline
	LED lighting
Car front return panel	Stainless steel hairline
Car transom	Stainless steel hairline

Side walls	Stainless steel hairline
Rear wall	Stainless steel hairline
Car skirting illumination*	LED recessed lights on both sides
Car door	Stainless steel hairline
Handrail	AA-Y138, Stainless steel hairline (Handrail at rear wall)
Car floor	S-693 Vinyl flooring

* Applicable with LM-220 ceiling.

CAR DESIGN (DEEP / WIDE CAR)

E-220   Wide Car   Standard

E-220 Stainless Steel Hairline   Wide Car   Optional

Bare ceiling height	2450mm
False ceiling height	2400mm
Car ceiling	LM-220
	Stainless steel mirror + Painted steel_WP71 (White)
	LED lighting
Car front return panel	Stainless steel hairline
Car transom	Stainless steel hairline

Side wall (Front panel)	Stainless steel hairline
Side wall (Rear panel)	Painted steel_YM47 (Champagne)
Rear wall	Painted steel_YM47 (Champagne)
Car skirting illumination*	LED recessed lights on both sides
Car door	Stainless steel hairline
Handrail	AA-Y138, Stainless steel hairline (Handrail at rear wall)
Car floor	S-693 Vinyl flooring

* Applicable with LM-220 ceiling.

| Bare ceiling height	2450mm
False ceiling height	2400mm
Car ceiling	LM-220
	Stainless steel mirror + Stainless steel hairline
	LED lighting
Car front return panel	Stainless steel hairline
Car transom	Stainless steel hairline

Side walls	Stainless steel hairline
Rear wall	Stainless steel hairline
Car skirting illumination*	LED recessed lights on both sides
Car door	Stainless steel hairline
Handrail	AA-Y138, Stainless steel hairline (Handrail at rear wall)
Car floor	S-693 Vinyl flooring

* Applicable with LM-220 ceiling.

DECORATION DEVICE

Car Operating Panel
Normal Car
(Hinge Type)

Car Operating Panel
Deep/Wide Car
(Surface Mounted Type)
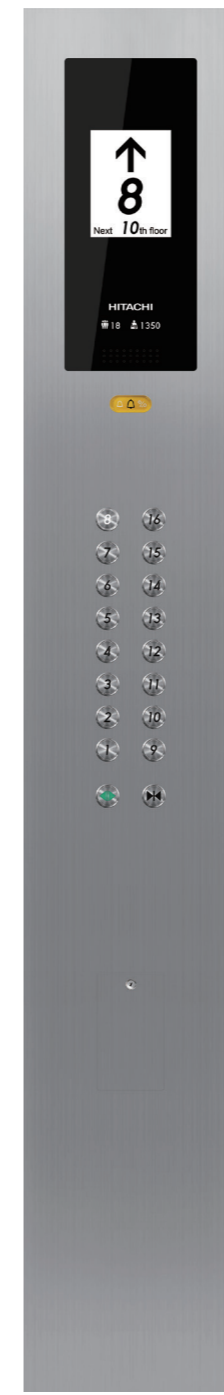
Button

GOPR-820

- **Indicator**
  Colour LCD

- **Button**
  WL-MWB

GOP-199

- **Indicator**
  Colour LCD

- **Button**
  WL-MWB

WL-MWB

- **Dimension**
  Φ36mm

- **Material**
  Rim: Stainless steel brushed
  Faceplate: Circular stainless steel
  hairline

- **Illumination**
  Symbol and periphery
  lighted up in white

- **Button with braille is available
  as option for maximum 2 digits**

- **"Door Close"
  Button**
  (Without illumination)

- **"Door Open"
  Button**
  (Without illumination)

- **"Floor"
  Button**
  (Without illumination)
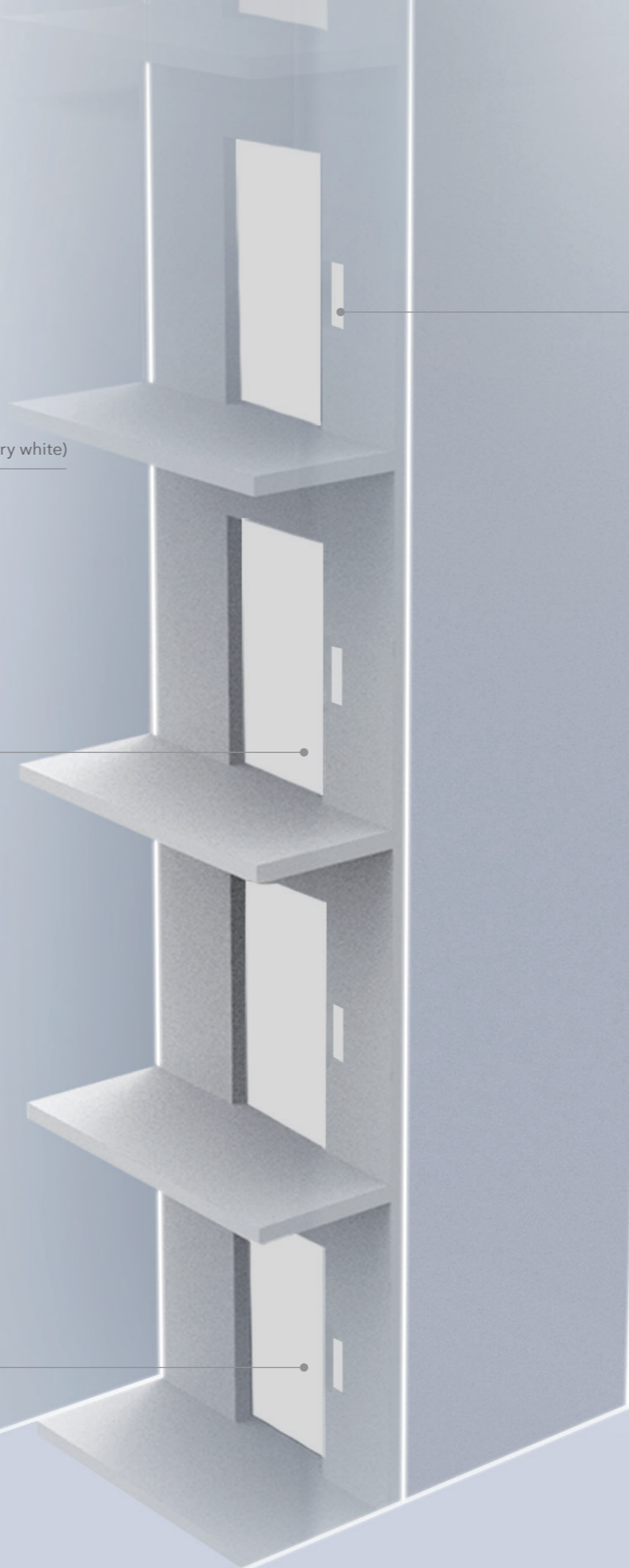
- **"Floor"
  Button**
  (With illumination)

At Other Floors

○ **Landing Door**

Painted steel_WN01 (Ivory white)

○ **Landing Jamb**

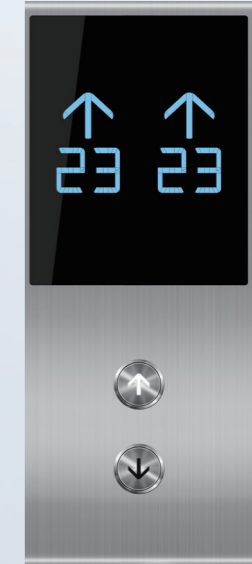AS-1X narrow type: Painted steel_WN01 (Ivory white)

At First Floor

○ **Landing Door**

Stainless steel hairline

○ **Landing Jamb**

AS-1X narrow type: Stainless steel hairline

VIB-820

VIB-820W

Hall Operating Panel

○ **Indicator**

Monochrome LCD

○ **Faceplate Material**

Stainless steel hairline
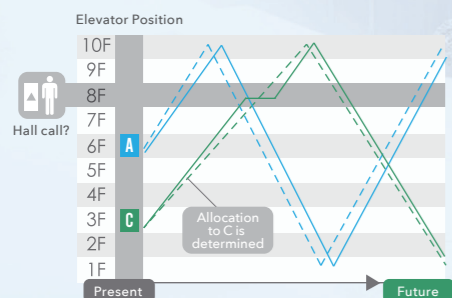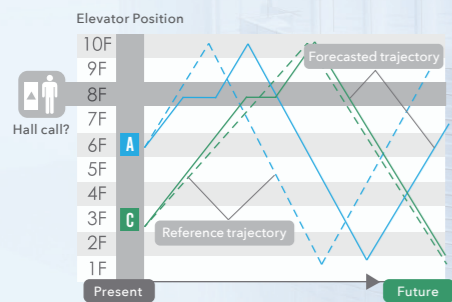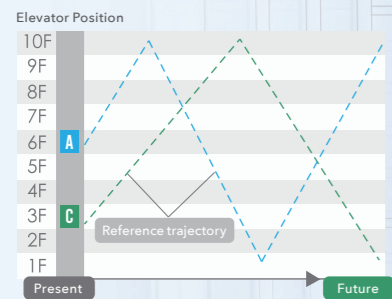
○ **Button**

WL-MWB

○ **Mounting**

Surface-mount type

SOLUTION
# CENTRE

ELEVATOR TRANSPORTATION SYSTEM

01 Human Flow Prediction Analysis

- Real-time monitoring and intelligent dispatching, evenly distribute the elevator calls
- Analyse overall human flow prediction, dynamic adjustment of future trajectory
- Shortens average waiting times, reduces rate of long waits

Elevator Position

10F
9F
8F
7F
6F A
5F
4F
3F C
2F
1F
Reference trajectory
Present / Future

Elevator Position

10F
9F
8F
7F
6F A
5F
4F
3F C
2F
1F
Hall call?
Forecasted trajectory
Reference trajectory
Present / Future

Elevator Position

10F
9F
8F
7F
6F A
5F
4F
3F C
2F
1F
Hall call?
Allocation to C is determined
Present / Future

02 Rush Hour Schedule Operation

- During preset rush hour interval, the system automatically predicts the human flow and assign elevators to concentrate services on floors with heavy traffic.
- During up-peak rush hour interval, the system automatically predicts the flow of people taking elevators and dispatches elevators to provide centralised service at the base floor.

13F

Automatically return   Automatically return

1F
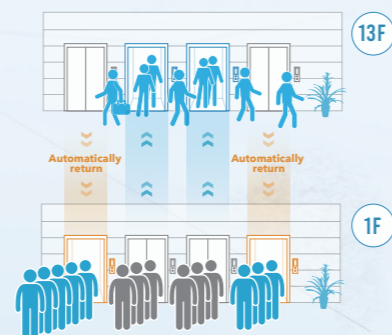
03 Destination Floor Reservation System, DFRS

Each passenger registers their destination floor on the registration device located at the landing hall and know in advance the designated elevator to take. System assigned one elevator for the passengers with the same destination floor. This reduces the number of stops, achieves traffic diversion, improves operational efficiency, and reduces waiting time.
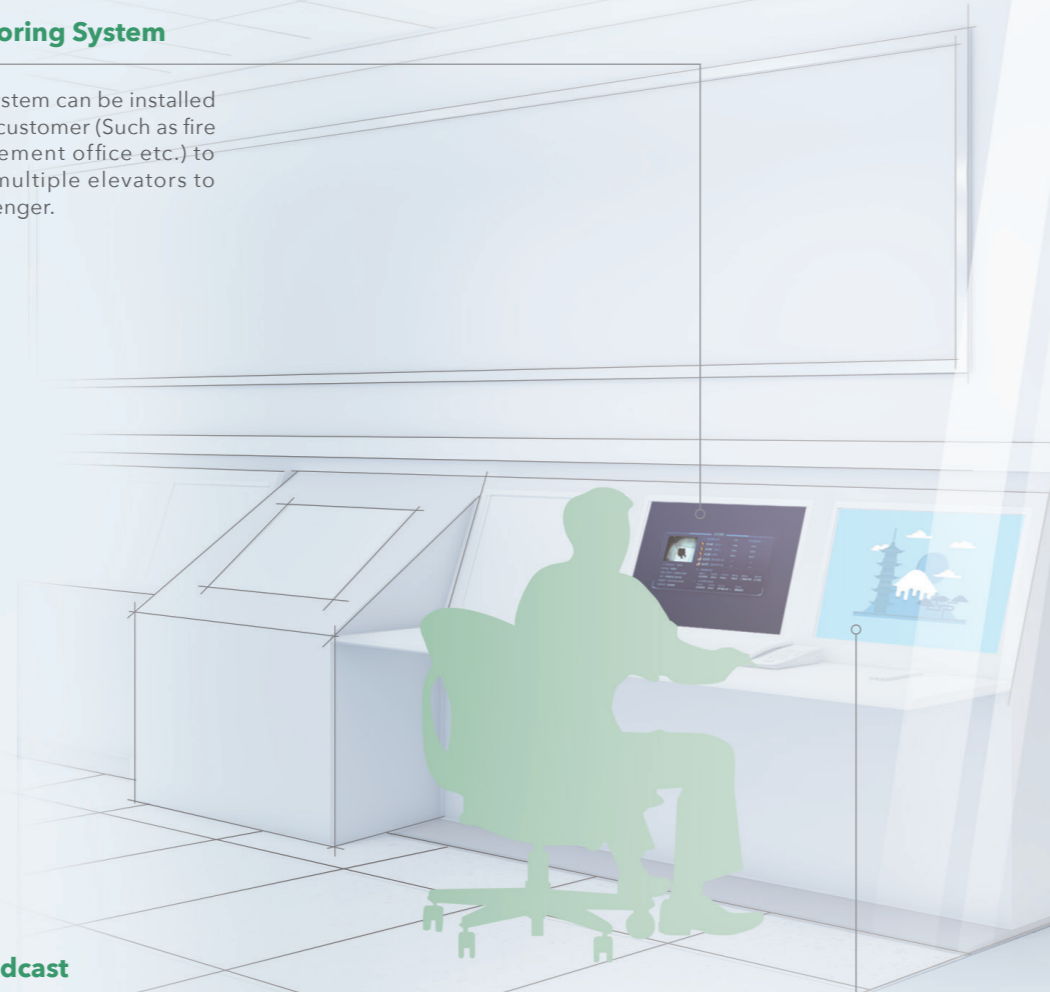
04 VIP Service

Used for serving VIP passengers in the building. When a VIP signal is received, the system will assign one elevator to break away from group control and provide dedicated service for the VIP passengers, by transporting them directly to the destination floor.

VIP

End of conference

A B C D

VIP
A   D

SMART MANAGEMENT SYSTEM

03 **Nighttime Protective Operation**

During specified nighttime hours, elevator will travel directly to the designated floor without responding to any hall calls to ensure the safety of the passengers.
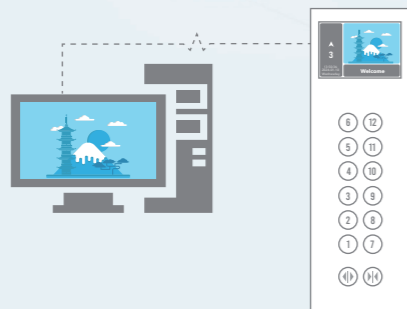
4F

BYPASS

1F

01 **Elevator Computer Monitoring System**

Elevator computer monitoring system can be installed at the locations specified by the customer (Such as fire control room, building management office etc.) to monitor the running status of multiple elevators to provide optimal services to passenger.

02 **Live Feed Broadcast**

Through the car multimedia LCD indicator connected to the building live feed broadcast system, information specified by customer can be displayed.
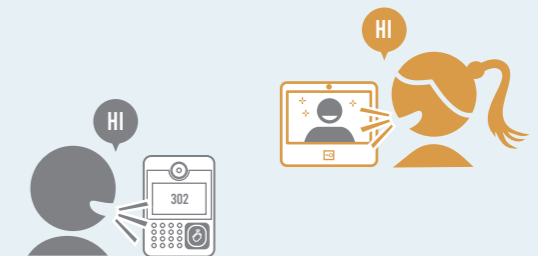
04 **Visual Intercom**

Elevator authorisation for visitor access or resident visits can be achieved through a visual intercom system. Residents can also use the indoor unit to obtain basic elevator operation status information or call the elevator.

CONTACTLESS ELEVATOR SYSTEM

01 Elevator Registration via Bluetooth

Passengers connect to the elevator via smartphone Bluetooth signals for verification. The elevator will be registered according to the authorised preset floor.
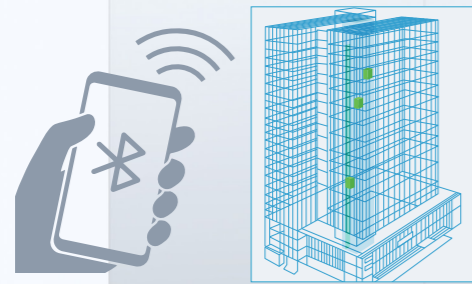
02 Elevator Registration via Medium Devices

Passengers use an IC card or a QR code generated through WeChat to call the elevator, without any contact with the elevator buttons. This effectively prevents the elevator buttons from becoming a virus transmission source.

ELEVATOR "CLEAN" FEATURES

01 Antibacterial Button

By adding highly efficient antibacterial ions to the button surface, residual bacteria on the buttons can be effectively suppressed, ensuring passenger safety. Hitachi antibacterial buttons have been certified by SGS, with an antibacterial rate of over 99% against Escherichia coli and Staphylococcus aureus.

02 Ultraviolet, UV Sterilisation

This function automatically detects and controls the ultraviolet sterilisation and disinfection lamp inside the car when the elevator is at idle (With no passenger) state, to achieve all-round sterilisation in the car.

EMERGENCY RESCUE SYSTEM

01 Power Failure Emergency

○ **Car Emergency Lighting**
In the event of power failure, the car emergency lighting will be lighted up automatically.

○ **Automatic Rescue Device (ARD)**
In the event of power failure, elevator powered by the automatic rescue device (ARD) will run to the nearest service floor at slow speed, levelled and stop at the landing with door open to prevent passengers from being trapped.

○ **Building Generator Operation**
During power failure, the power supply system of the elevator will switch to building generator power automatically to maintain continuous operation of elevators.

Automatic Rescue Device (ARD)

Building Generator Operation
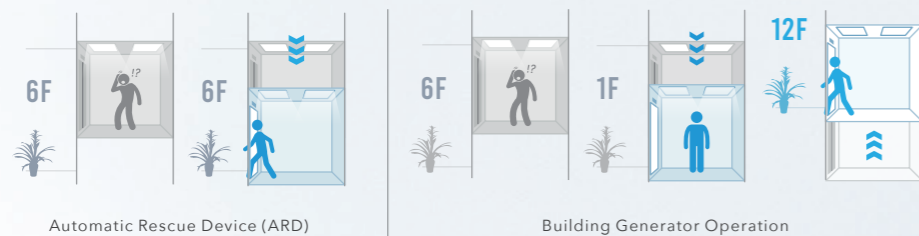
02 Fire Emergency

○ **Fire Emergency Operation**
Upon receiving the fire signal, the elevator will automatically home to the fire return floor with its door open to let the passengers out. This ensure the safety of the passengers in the elevator.

○ **Fireman Operation**
After the elevator reaches the fire return floor with its door open, the fireman can use the elevator to perform rescue.

Fire Return Floor

FIRE RETURN FLOOR

FIREMAN OPERATION

03 Interphone System

When passenger presses the emergency call button on the car operating panel, they can communicate with the management in the machine room or monitoring center.

"What happen?"

"What's wrong?"

04 Earthquake Emergency Operation

When an earthquake is detected, the elevator system controls the running elevator to stop and levelled at the nearest service floor with its door open, to ensure the safety of passengers.
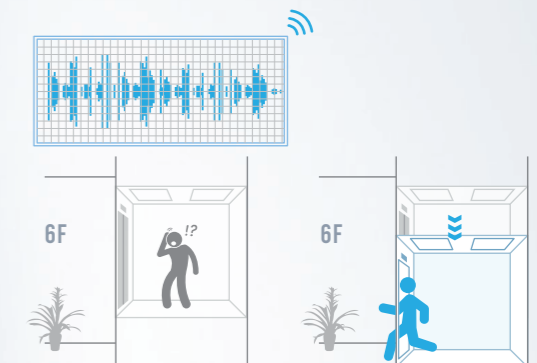
05 Pit Flood Operation

When there is water ingress in the pit and float switch is activated, the elevator will operate under pit flood control mode. The elevator will travel up to the evacuation floor and open the door for the passengers to leave. The elevator can only resume normal operation after the float switch is manually reset.