



The Almighty Smart Bin

that can be placed everywhere in the city



A smart bin is particularly developed to break the challenges in Hong Kong.



- Status LED Indicator
 - Green: Unlock
 - Red: Locked
 - Yellow: Nearly Full
 - Orange: Trash Full
- Power LED Indicator
 - Green: Power On
 - Red: Battery < 20%

Network module & Antenna

NFC Reader to unlock the auto-lock

Approaching Sensor to wake up the 4G module and connect to network

Manual Unlock & Master Power Off

Scale Module
Max. Reading : 150kg
Tolerance : +/- 50g or +/- 1%, whichever is bigger

Ball Bearing for sliding on the floor x 4

Detachable lithium ion battery pack X 2 (28800mAh / battery pack)

Type-C 60W Super Fast Charging Port

Electrical Auto-Lock to lock the top cover

GPS module & Antenna

Level Sensor for volume detection

Scan the unique QR code label on the bin to unlock the auto-lock and points redeem to user ID via cloud sever

Front Step Foot Pedal to open the lid

To help two situations out



From resident's angle, the availability of current facilities is not enough, and locations of facilities are too spread.



From operator's angle, the current facilities is hard to be scalable, and there are insufficient smart aids.

IB-120 Smart Bin

Waste Weighting

Industrial grading load cell to precisely measure every contribution of waste.
1g to 150kg +/-50g or +/- 1%

GPS Tracking

With the comprehensive location tracking feature, it helps operators locating the bins scattered in every corner in the city.

Loyalty Card System

By presenting a loyal NFC card, the system shall record waste contributions. FMO can set up cost sharing or incentive schemes.

FMO Console

A web based console shows information about waste weight, level, location, operation status, battery level, and historical log.

IP67 Waterproof

IB-120 Smart Bin is delicately engineered to be waterproof to withstand the harsh and wet working environment.

Detachable Battery

Two battery packs with total 57,600mAh are equipped to facilitate mobility and flexibility of the IB-120 Smart Bin.

Level Detection

IoT system shall notice operators for waste collection when the bin is full. So, it saves our hands on keep checking the bins.

Reward Points

Waste contribution can link to incentive packages or points system from 3rd parties to motivate recycling habit in public.

Auto e-Lock

An e-lock is equipped for hygienic protection, it can be released by QR code scanning or presenting a loyalty NFC card.

Swift Connection

For sake of energy saving, system gets into sleep mode when idle. Seamless connection to network when user is approaching.

Impact Resistant

Bumping, shaking, and occasional falling are not avoidable in daily operation, it is engineered to be reliable against impacts.

Super Charge

Battery pack is equipped with PD60W USB-C port, which features the battery can be charged up in a very short time.