



COMPANY PROFILE

သင့်ယုံကြည်ရာအနာဂတ်သစ်ပိတ်မြန်မာအိလက်ထရစ်
Your Trustful Future

28 March 2026



Presented by U Htay Win Aung



Product Representative Manager(HVAC)



Sale Deptment

Company Milestone / Timeline

1994



ESTABLISHED IN 1994



1997



THE FIRST CITY MULTI SEMINAR IN MYANMAR @ HOTEL NIKKO (YANGON)

1995



LAUNCHING SERVICEA CENTRE

1999



START SWITCHGEAR SUBSTATION

1998



STARTING DUCT INSTALLATION

2003



THE GRAND OPENING OF NEW HEAD OFFICE & SHOWROOM @ YANGON

2000



DEVELOPING MAINTENANCE & SERVICING TEAM

2005



PME SERVICE CENTER @ MANDALAY

2004



THE OPENING OF NEW BRANCH @ MANDALAY

2007



PRODUCTS SHOW & PARK ROYAL YANGON

2006



THE OPENING OF NEW BRANCH @ NAYPYITAW

Company Milestone / Timeline

2009



NEW PARLIAMENT PROJECT @ NAYPYITAW

2008



THE PRESIDENT HOUSE PROJECT @ NAYPYITAW

2011



ISO CERTIFICATE AWARDING SERVICE CENTER

2010



HARDWARE SHOW @ MANDALAY

2013



DISTRIBUTOR MEETING @ YANGON

2012



ISO CERTIFICATE AWARDING HEAD OFFICE

2016



DONATED BY THANLYIN TU

2015



SIGNING CEREMONY WITH MES @ CHATRIUM YANGON

2018



DONATED BY MAGWAY TU

2017



AIRCON DONATION @ SHWEDAGON PAGODA

2023



SAP SOFTWARE LAUNCHED

2019



25 ANNIVERSARY OF PEACE MYANMAR ELECTRIC HOLDING CO.; LTD.

Our Products Lineup

Commercial & Residential Air Conditioners



MITSUBISHI ELECTRIC
Authorised Distributor



PME Holding Co., Ltd.

Air Conditioner

Inverter Single Split System

MSY - JS 10 / 13 / 18 / 24 VF



- Anti Mold Filter (Pre-Blue)
- DDC (True)
- Compressed Dehumidification
- Fuzzy Logic (i-Feel)
- Fast Cooling
- Auto Mode
- Sleep Mode
- 24 Hours ON/OFF Timer
- LCD Wireless Remote Controller
- Auto Restart
- Anti-Rust Treatment
- Durable Electronic Metal Housing
- Emergency Circuit Protection
- Self-Diagnosis (LED Blinking)
- Auto Fan Mode
- Blue Fin Condenser

Non Inverter Single Split System

MS - JS 10 / 13 / 18 / 24 VF



- 4-in-1 Multi Filter (Pre-Blue)
- Easy Clean Design
- BRC (Iron)
- Compressed Dehumidification
- Fuzzy Logic (i-Feel)
- Soona Cool
- Powerful Cool
- Auto Mode
- 24 Hours ON/OFF Timer
- LCD Wireless Remote Controller
- Auto Restart
- Anti-Rust Treatment
- Durable Electronic Metal Housing
- Emergency Circuit Protection
- Self-Diagnosis (LED Blinking)
- Auto Fan Mode
- Blue Fin Condenser

Ceiling - Suspended

PCY - SM 18 / 24 / 30 / 36 / 42 / 48 KA (R 32 Inverter)



Ceiling - Cassette

PLY - SM 18 / 24 / 30 / 36 / 42 / 48 EA (R 32 Inverter)
PL - M 18 / 24 / 30 / 36 / 42 / 48 BA (R 32 Non-Inverter)



Ceiling - Concealed

PEY - SM 18 / 24 / 30 / 36 / 42 / 48 JA(L) (R 32 Inverter)
PL - M 18 / 24 / 30 / 36 / 42 / 48 JA(K) (R 32 Non-Inverter)



Ceiling - Casseted

PEY - SM 18 / 24 / 30 / 36 / 42 / 48 KA (R 32 Inverter)
PL - M 18 / 24 / 30 / 36 / 42 / 48 BA (R 32 Non-Inverter)



Floor Standing Type

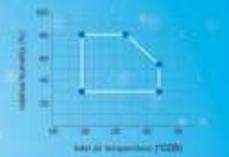
PFV Models

Features:

- Easy installation and maintenance
- Suitable for use in areas where duct installation is not possible (i.e. high ceiling or ceiling with crane rails)
- Satisfies large capacity air conditioning needs
- Adjustable air flow and static pressure

Line up



Wide temperature range

18°C (Cooling) / 20°C (Heat) / 24°C (Cooling) / 24°C (Heat)

Ceiling Concealed Type

PEV Model

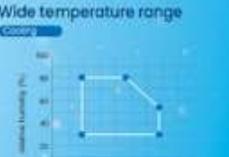
Features:

- Flexibly accommodates various types of duct design
- Installable when no floor space is available
- Suitable for use in areas where air flow from floor-standing models would be interrupted by the equipment in the space
- Suitable for use in facilities such as food manufacturing plants where floor-standing models are not suitable because of cleaning requirements

Line up



10HP



Wide temperature range

18°C (Cooling) / 20°C (Heat) / 24°C (Cooling) / 24°C (Heat)

PUMY - CP 100 / 125 / 140 V/YKM

PUMY - CP 175 / 200 / 225 YKM

PUMY - CP 250 / 300 YBM

Features:

- Light weight and compact size
- Realized cooling operation at 13°C and rated cooling capacity of 43C
- High external static pressure keeps enough capacity even for the installation in high-rise building
- Noise level reduced by maximum 10dB(A) thanks to Super silent mode
- Branch box and dV at can be connected
- Light weight and compact size
- Compact design fits into narrow outdoor unit space of condominiums and offices
- Light weight design facilitates easy installation.

Features:

- Cooling operation at 13°C and rated cooling capacity of 43C
- New inverter technology has made it possible for units to operate at outdoor air temperature as high as 52°C
- Performs well even at the narrow space and multiple installation where heated air rise



New Models

Wide Selection of Indoor Units

Ceiling Cassette Type

Line up



Ceiling Concealed Type

Line up



Other Type

Line up



Other Type

Line up



Comparison of EER (Energy Efficiency Ratio) - 20HP system



Product	EER (kWh/kW-h)	Improvement
Standard product (manufactured in 1998)	2.73	-
Standard model PUMY200E	3.80	39% UP
High efficiency model PUMY200E	4.51	65% UP

Key Technologies

All main parts of VKE and VVD series products select ecological materials of Mitsubishi Electric. This results in high energy efficiency, enhanced cooling capacity at high outside air temperatures, and further improved reliability.



Labels: Inverter technology, Compressor, Heat exchanger, Fan

Our Products

Ventilation, Living Electric, Pumps, Motors, Low/High Voltage Switch Gears & Cables

High Pressure Fan

EW-25 to 45-E (Exhaust Type) **EW-45 to 50-E (Exhaust Type)** **EW-25 to 50-Q-2 (Supply Type)**

EW-2500A-E
EW-3000A-E
EW-3000A-E
EW-4000A-E
EW-4500A-E

EW-4500A-E
EW-5000A-E
EW-5000A-E
EW-5000A-E
EW-5000A-E

EW-2500A-Q-2
EW-3000A-Q-2
EW-3000A-Q-2
EW-4000A-Q-2
EW-4500A-Q-2
EW-5000A-Q-2
EW-5000A-Q-2
EW-5000A-Q-2
EW-5000A-Q-2

Refrigerator

MR-25SR Crystal Blue (5 Door) **MR-F2BE (2 Door)** **MRTE (1 Door)**

- Auto Door
- UV LED Auto Ionizer
- WAKAI Sensor
- Additional Filter on Top Panel
- Vitamin Factory (LED Sunlight)

- LED Sunlight
- Revolving the Tray in 50 seconds

- Crystal Blue Mesh Air Filter

Electric Fan

LV 16-R **LV 16-G** **W 16-B**

16 inch Propeller with Crystal Blade. The MCCM system is control by using a remote control. Rhythm mode inhibits natural air flow. Three speed micro switch. Automatic on-off timer. Power consumption is low and the motor is reliable.

16 inch Propeller with Crystal Blade. The MCCM system is control by using a remote control. Rhythm mode inhibits natural air flow. Three speed micro switch. Automatic on-off timer. Power consumption is low and the motor is reliable.

The MCCM system is controlled using a remote control. Rhythm mode inhibits natural air flow. Three speed MCCM switch. Automatic off timer.

W 16-G **CY 16-G** **C-55**

16 inch Propeller. Designed for easy installation in small rooms. Controlled by remote. Power consumption is low and the motor is reliable. Three speed and on/off timer. Full switch.

Energy efficient design throughout the room. Oscillation angle: 360°. Regulated by synchronous motor with soft start. A timer switch that can stop the swinging function of the propeller. Installation uses a three-way electrical cord.

Model Diameter: 56.5cm (22.25 inch)
4.5.3 Blade Ceiling Fan
Remote Control
3 Speed Level Control
CFI Series (1-2-3-4-5-6-7-8-9-10)

Air Curtain

OK Standard Type

- Office
- Shop
- Hotel

Lossnay

Outdoor & indoor
Exhaust Air (2-stage indoor air)
Supply Air (2-stage heating/cooling air)
Outdoor Air (Fresh air exhaust)
Room Air (State oil induction)

VL-100US-E
Single ventilation through heating or 2 distribution boxes.
Low noise (Less than 20dB at low noise).
Inverter 2-in system.
Air-water, low/high 2-inch.
Air supply/without pipes and plastic weather cover are supplied at accessories.
Equipped with an outdoor-air shutter.
Full-range switch.

Ventilation

EX-20 SH/EX-25 SH/EX-30 SH/EX-20 SKC/EX-25 SKC **V-10SL, V-20SL** **VD 10, 15, 18, 20, 25 Z**

Removable. Operates quietly. Easy to Clean. Energy efficient. Beautiful grille.

Operates quietly. Easy to Clean. Energy efficient.

Pressure type with centrifugal fan. Removable resistant plastic grille. Equipped with lead-lath of ultra-thin 14 gauge. Quick connect terminal. Slide-type installation and removal. Always grounded the ventilator when installation in bathroom and other humid places.

Water Pump

Automatic Constant Pressure Pump **Well Pump**

SP-65, 305, 305, 425 WP-65, 305, 305

Small Pump **Sand Pump** **Automatic Multi Stage Pump** **1-1CH Series**

SP-4000 WCM/WCM-175, 195, 225, 245 [MCM-100A, 200A, 300A, 400A] [MCM-100A, 200A, 300A, 400A]

Jet Towel

JT-SB21615H / JT-SB21615K

- 1m operating width
- Quicker drying through staggered rollers
- Hygiene no-contact drying
- Good reliability of the product quality

Electric Motor

BP-JR 10HP-4P 132M BCL-ER 10HP 132ML SP-JR 2HP 90L SB-JRV 50HP-4P 132M (Vertical Type)

BEAMS

FXDG Q Series PLC Variable Speed Drive (VSD)

Medium & Low-voltage Switchgear and Systems

Magnetic Switch Miniature Circuit Breaker (MCB) Residual Current Circuit Breaker (RCCB) Molded Case-Circuit Breaker (MCCB) Air Circuit Breaker (ACB)

Vacuum Circuit Breaker (VCB) Electronic multi-measuring instrument Digital K10 Watt-hour Meter K10 Watt-hour Meter (Single-Phase) K10 Watt-hour Meter (Three-Phase)

Numerical Protection Relay Cubic type Gas-insulated Medium Voltage Switchgear

MELPRO® Series

VAZAKI

Our Products

Building Management System & Automation

MITSUBISHI ELECTRIC
Changes for the Better

IDECC

Building Energy And Automation Management System

FA PRODUCTS

CONTROLLERS

- Programmable Logic Controller (PLC)
- Graphic Operation Controller

Drives

- Inverters (VSD)

Visualization

- Human Machine Interface (HMI) - GOT
- SCADA MC WORKS64

PROGRAMMABLE LOGIC CONTROLLER (PLC)

PLC သုံးစွဲ
Machine Control နှင့် Process control စနစ်တွင် အသုံးပြုရန်အတွက် အကောင်းဆုံး Controller သစ်ဖြစ်သည်။
Automation ဖြစ်သည့် ဆက်သွယ်စနစ်များအတွက် PLC ကို အသုံးပြုနိုင်ပါသည်။

PLC ကို အသုံးပြုနိုင်သည့် အားသာချက်များ
- ဆက်သွယ်ရန် Main Power ကို အသုံးပြုနိုင်ပါသည်။
- ရန်ကင်းစနစ် ဖြစ်ပေါ်နိုင်သည့် အန္တရာယ်ကို ကာကွယ်နိုင်ပါသည်။
- Process မှားယွင်းမှုကို ကာကွယ်နိုင်သည့် အကောင်းဆုံး Controller ဖြစ်သည်။
- Production Capacity တိုးမြှင့်နိုင်ပါသည်။
- အစားအပျက်များကို ကာကွယ်နိုင်သည့် အကောင်းဆုံး Controller ဖြစ်သည်။

PLC ကို အသုံးပြုရန် အားသာချက်များ
- အားလုံးကို အသုံးပြုနိုင်သည့် အကောင်းဆုံး Controller ဖြစ်သည်။
- အသုံးပြုရန် အလွယ်တကူပါသည်။
- အသုံးပြုရန် အလွယ်တကူပါသည်။
- အသုံးပြုရန် အလွယ်တကူပါသည်။

Variable Speed Drive (VSD)

VSD သုံးစွဲ
VSD (Variable Speed Drive) (VSD) (Variable Frequency Drive) (VFD) ဟုလည်းခေါ်ဆိုသည်။
AC Motor မှာ အသုံးပြုရန် (Frequency) မြင့်မားလာခြင်း ဖြစ်ပေါ်လာခြင်းကို ကာကွယ်နိုင်သည့် အကောင်းဆုံး Controller ဖြစ်သည်။

VSD ကို အသုံးပြုနိုင်သည့် အားသာချက်များ
- Soft Start/Stop ဖြစ်ပေါ်ခြင်းဖြင့် စနစ်အား အသုံးပြုနိုင်ပါသည်။ (Power Consumption 20% Off)
- အားလုံးကို အသုံးပြုနိုင်သည့် အကောင်းဆုံး Controller ဖြစ်သည်။
- အသုံးပြုရန် အလွယ်တကူပါသည်။
- အသုံးပြုရန် အလွယ်တကူပါသည်။
- Operation Speed အသုံးပြုနိုင်သည့် အကောင်းဆုံး Controller ဖြစ်သည်။
- အသုံးပြုရန် အလွယ်တကူပါသည်။

VSD ကို အသုံးပြုရန် အားသာချက်များ
- အားလုံးကို အသုံးပြုနိုင်သည့် အကောင်းဆုံး Controller ဖြစ်သည်။
- အသုံးပြုရန် အလွယ်တကူပါသည်။
- အသုံးပြုရန် အလွယ်တကူပါသည်။

MITSUBISHI PLC (Q Series)

MITSUBISHI PLC (FX Series)

IDECC PLC (FC-6A)

FR-D700 SERIES MITSUBISHI VSD (JAPAN)

FR-CS90 SERIES MITSUBISHI VSD (CHINA)

Visualization

GOT (Graphic Operation Terminal) သုံးစွဲ
GOT သုံးစွဲရန် အားသာချက်များ
- အားလုံးကို အသုံးပြုနိုင်သည့် အကောင်းဆုံး Controller ဖြစ်သည်။
- အသုံးပြုရန် အလွယ်တကူပါသည်။
- အသုံးပြုရန် အလွယ်တကူပါသည်။

GOT သုံးစွဲရန် အားသာချက်များ
- Operation Panel Size အသုံးပြုနိုင်ပါသည်။
- Panel Wiring Installation အသုံးပြုနိုင်ပါသည်။
- Operation System Design ကို အသုံးပြုနိုင်သည့် အကောင်းဆုံး Controller ဖြစ်သည်။

MITSUBISHI GOT (1000,2000 SERIES)

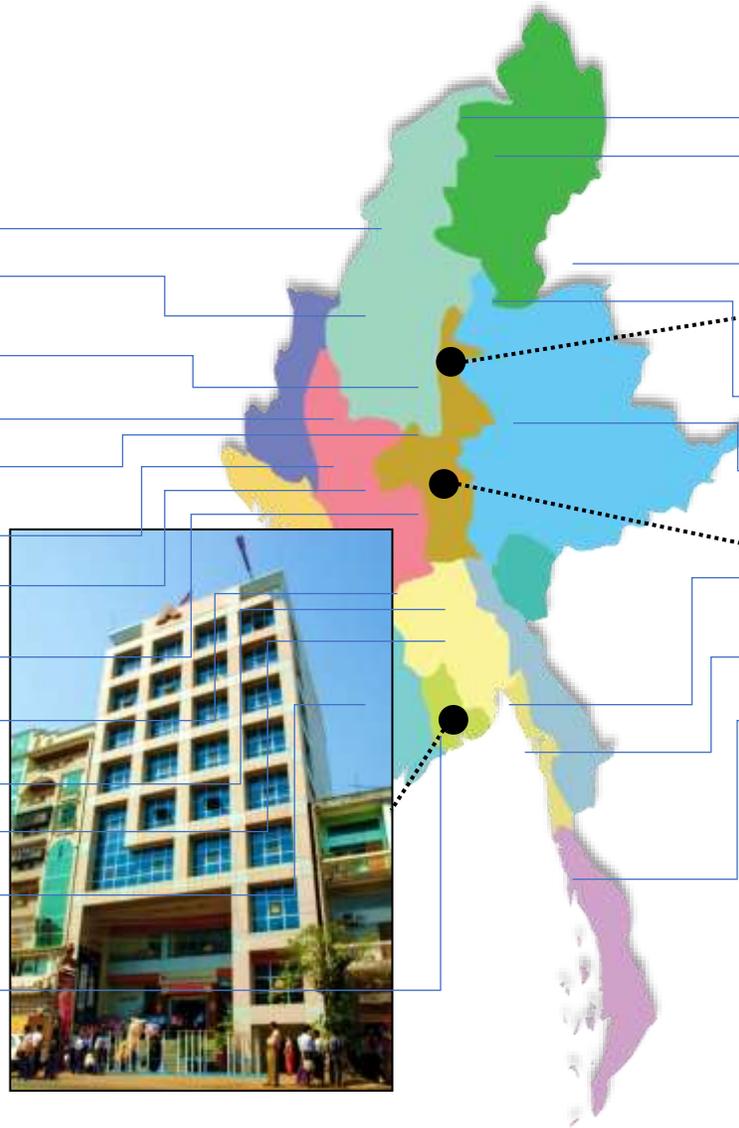
IDECC GOT (HG1G,2G,3G,4G,5G SERIES)

SCADA သုံးစွဲ
SUPERVISORY CONTROL AND DATA ACQUISITION သည် Manufacturing, Production process မှာ အသုံးပြုရန် အကောင်းဆုံး Controller ဖြစ်သည်။
- SCADA သုံးစွဲရန် အားသာချက်များ
- SCADA Function မှာ အသုံးပြုရန် အကောင်းဆုံး Controller ဖြစ်သည်။
- Alarm System (လက်ခံစနစ်) မှာ အသုံးပြုရန် အကောင်းဆုံး Controller ဖြစ်သည်။
- Trend System (System အသုံးပြုရန် အကောင်းဆုံး Controller ဖြစ်သည်။
- Report System (Operation အသုံးပြုရန် အကောင်းဆုံး Controller ဖြစ်သည်။



Cities of Distributor & Partnership Install Service Team

- Shwe Bo
- Mone Ywar
- Mandalay (22 Dealers)
- Myingyan
- Meiktila
- Pakokku
- Magway
- Nay Pyi Taw (14 Dealer)
- Pyay
- Taungoo
- Bago
- Pathein
- Hinthada
- Myaungmya
- Maubin
- Kangyidaunt
- Yangon (99 Dealers)



- Phar Kant
- Myitkyina
- Muse
- Lashio
- Kalaw
- Pyin Oo Lwin
- Taunggyi
- Hpa-An
- Mawlamyine
- Dawei
- Myeik



Total Cities Distribute - 28
Total Dealers Distributors - 151
Partnership Install Service Team - 221

The Biggest Service Team in Myanmar

PME Holding

MITSUBISHI ELECTRIC
Authorised Distributor

THE BIGGEST SERVICE TEAM in MYANMAR

CUSTOMER CARE
09-977 255 777
customercare.ccext@pmeholding.com

"အချိန်နှင့်တစ်ပြေးညီ ဝန်ဆောင်မှုများပေးနေတာ PMEH Service Center"

ကတ်စတန်မာများရှိရာနေရာကို ဝန်ဆောင်မှုများပေးနိုင်ရန် အရောက်လှမ်းလာဖို့ PMEH ၏ Service Engineer Team, Mobile Team, Mobile Team, PIS Team များမှ အချိန်နှင့်တစ်ပြေးညီ ကြိုးပမ်းဆောင်ရွက်လျက်ရှိပါတယ်။

Aircon Installation, Servicing, Repair ပြုလုပ်ခြင်းများနှင့် အခြား Home Appliance ပစ္စည်းများအတွက် ထိန်းသိမ်းပြုပြင်ရန် လိုအပ်ပါက PMEH Service Center ကိုသာ သတိရလိုက်ပါ.....

Customer Care

: 09-977 255 777

: customercare.ccext@pmeholding.com

The Biggest Service Team in Myanmar

221 Partnership Install Service (PIS) Teams nationwide



Engineering Design: Survey, model selection, and load calculation.



Execution: Installation, testing, and commissioning.



Maintenance: Regular servicing, repair, and Mobile Teams for rapid dispatch.



Training: Nationwide programs ensuring factory-standard execution.



We Don't Just Order Parts. We Hold Them.

3,789

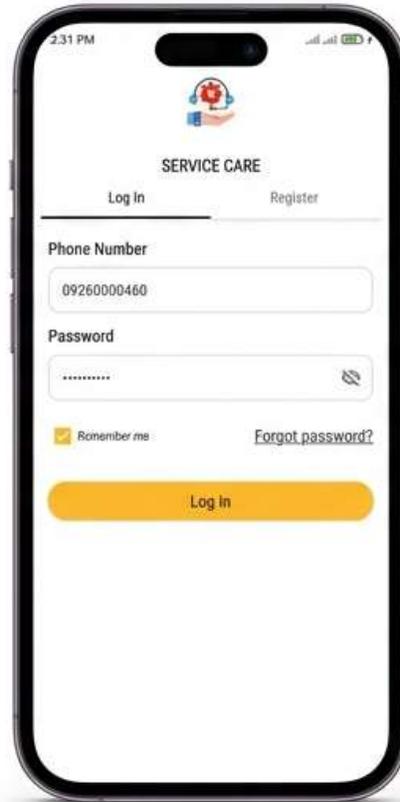
**Unique Spare Parts
Items In Stock**

PMEH Service Centre maintains a massive inventory of approx. 4,000 spare part types. We solve the difficulty of finding parts so you can live with peace of mind. Immediate repair capabilities vs. months of waiting for imports.



Service Care App : Support in Your Palm

We have digitized after-sales support to eliminate phone tag and uncertainty.



• **Instant Booking:** Schedule installation or repair.



• **Transparency:** Track repair history and find technicians.



• **Digital User Guides:** Video tutorials on demand.



Available on Google Play and Apple App Store.



CUSTOMER CARE

09-977 255 777
customer care.ccext@pmeholding.com

Jet Towel



Jet Towel was Born **in Mitsubishi** in 1993

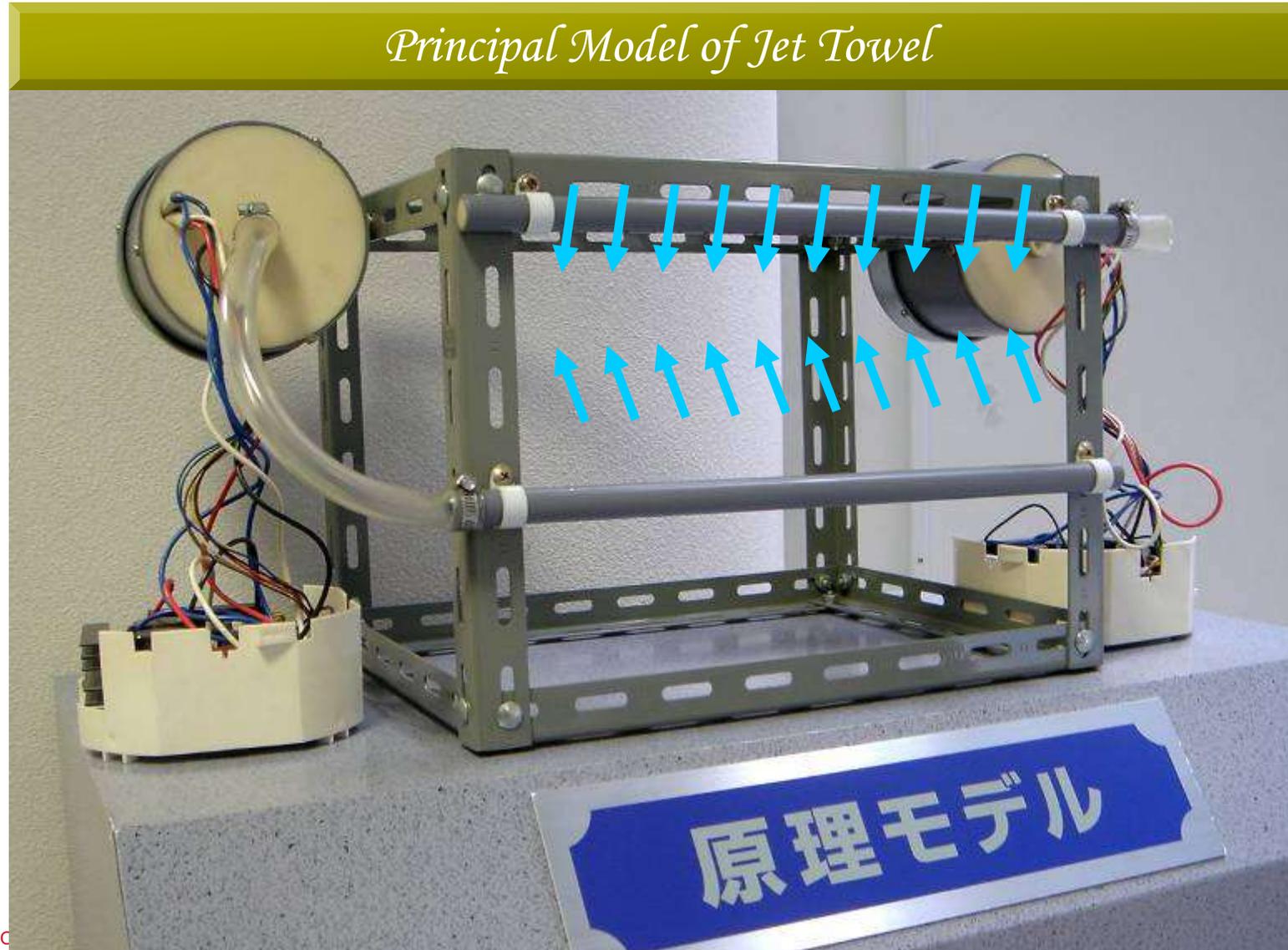


- MITSUBISHI ELECTRIC invented and created jet air hand dryer first in the world.

Jet Towel was Born **in Mitsubishi** in 1993

- **MITSUBISHI ELECTRIC** invented and created jet air hand dryer first in the world.

History



Three Line Up for Asian Market



Slim



Smart



Mini

Concept

Easy on the environment & Saving energy or Saving cost

DC brush-less motor

+

Turbofan

=

High-pressure
air

Feature:

- (1) High power
- (2) small motor
- (3) high efficiency
- (4) High rotation speed
- (5) long life time

<Previous hand dryer market>

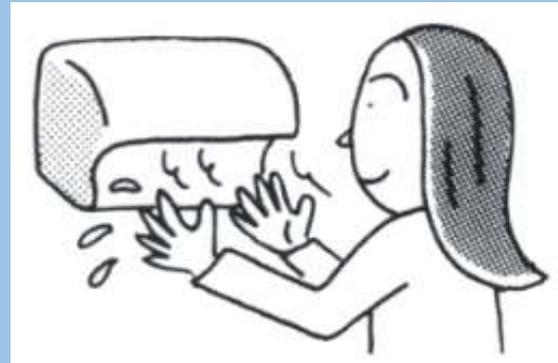
Paper towel



Cloth towel



Electric hand
dryer



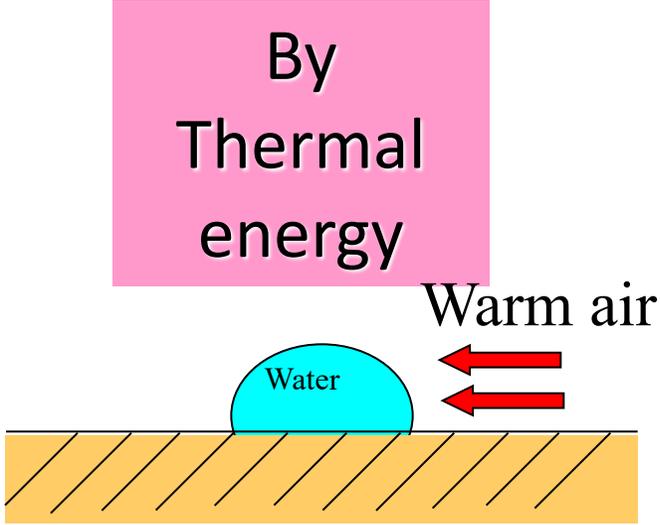
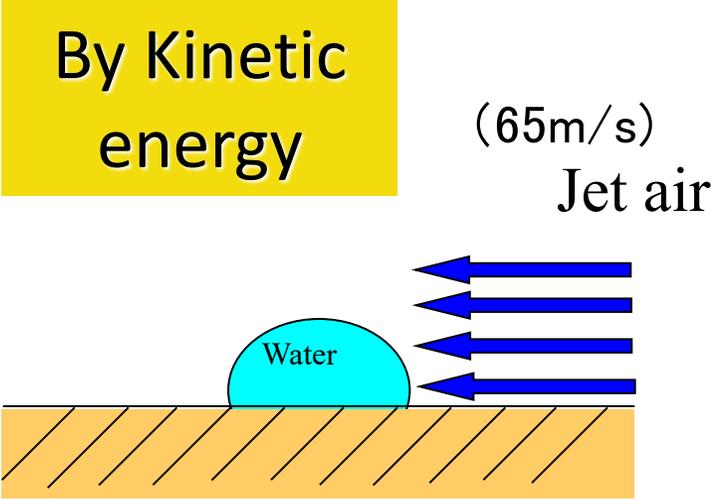
3 main products

The Evaluation of Hand Dryers

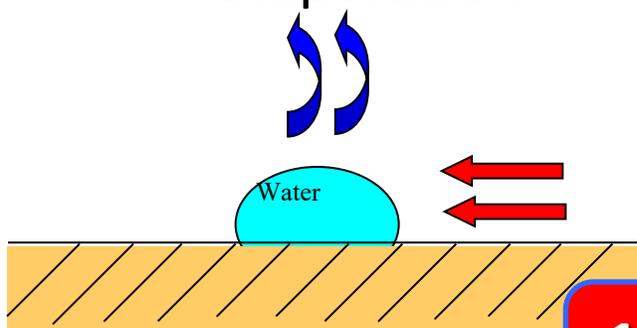
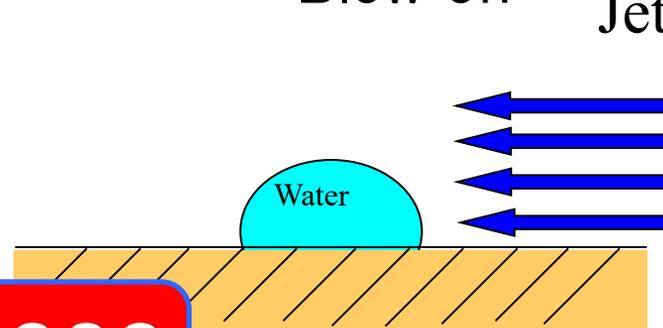
	<u>Paper Towel</u>	<u>Cloth Towel</u>	<u>Electric Hand Dryer</u>
User	Fast drying 	Unhealthy 	Slow Drying 
Owner	*Maintenance *Maintenance cost 	*Maintenance *Maintenance cost 	*Low Maintenance cost *Water drips on the floor 

- There are no perfect Hand Dryers

Mechanism of drying

	Evaporation method	Jet air method
Principle	<p>By Thermal energy</p>  <p>On the hand</p>	<p>By Kinetic energy</p>  <p>On the hand</p>
Energy	<p>(The evaporation of water latent heat) X (mass number)</p>	<p>(Mass number) x (Air velocity)² / 2</p>

Mechanism of drying

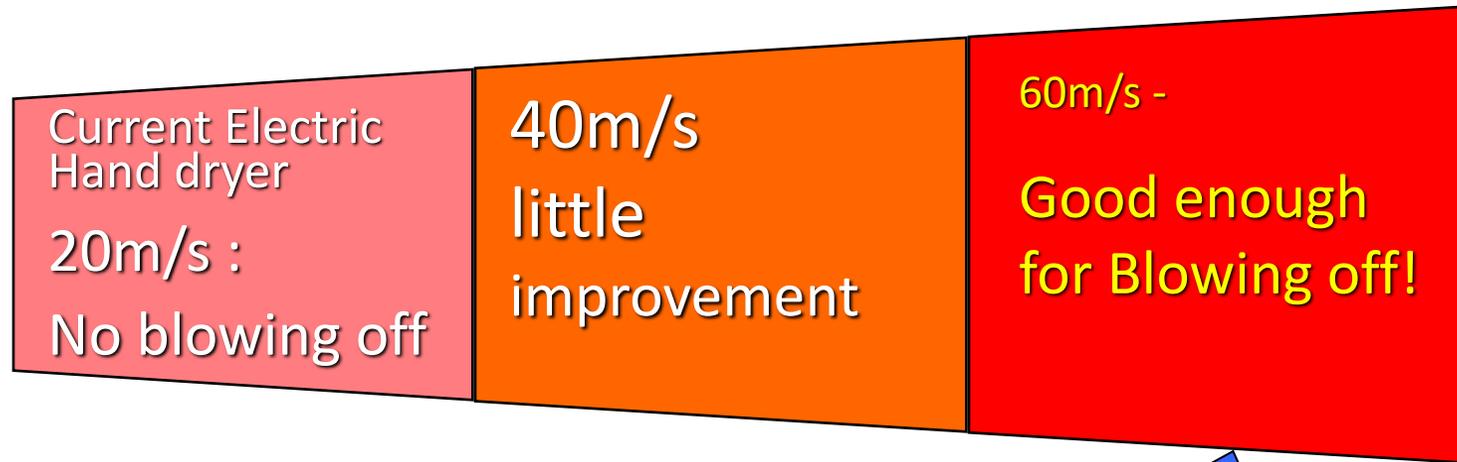
	Evaporation method	Jet air method
Principle	<p>By Thermal energy</p> <p>Evaporation</p>  <p>Water</p> <p>On the hand</p>	<p>By Kinetic energy</p> <p>Blow off (65m/s) Jet air</p>  <p>Water</p> <p>On the hand</p>
Energy	4900J	4J

1/1000

>

Save energy

The air velocity for the efficient drying



$$60\text{m/s} = 0.06\text{km} \times 3600/\text{h} = 216\text{km/h} = 134\text{mile/hr}$$

2. Features

<3 main features>

1. 5-10 seconds high speed drying

2. No wasting paper

3. Good cost performance

1. 5-10 seconds high speed drying

<High speed drying>

- * **Dual Jet air flow method**
- * **No.1 speed drying**
- * **5-10 seconds high speed drying**



2. No wasting paper

Disposed amount of Paper towel



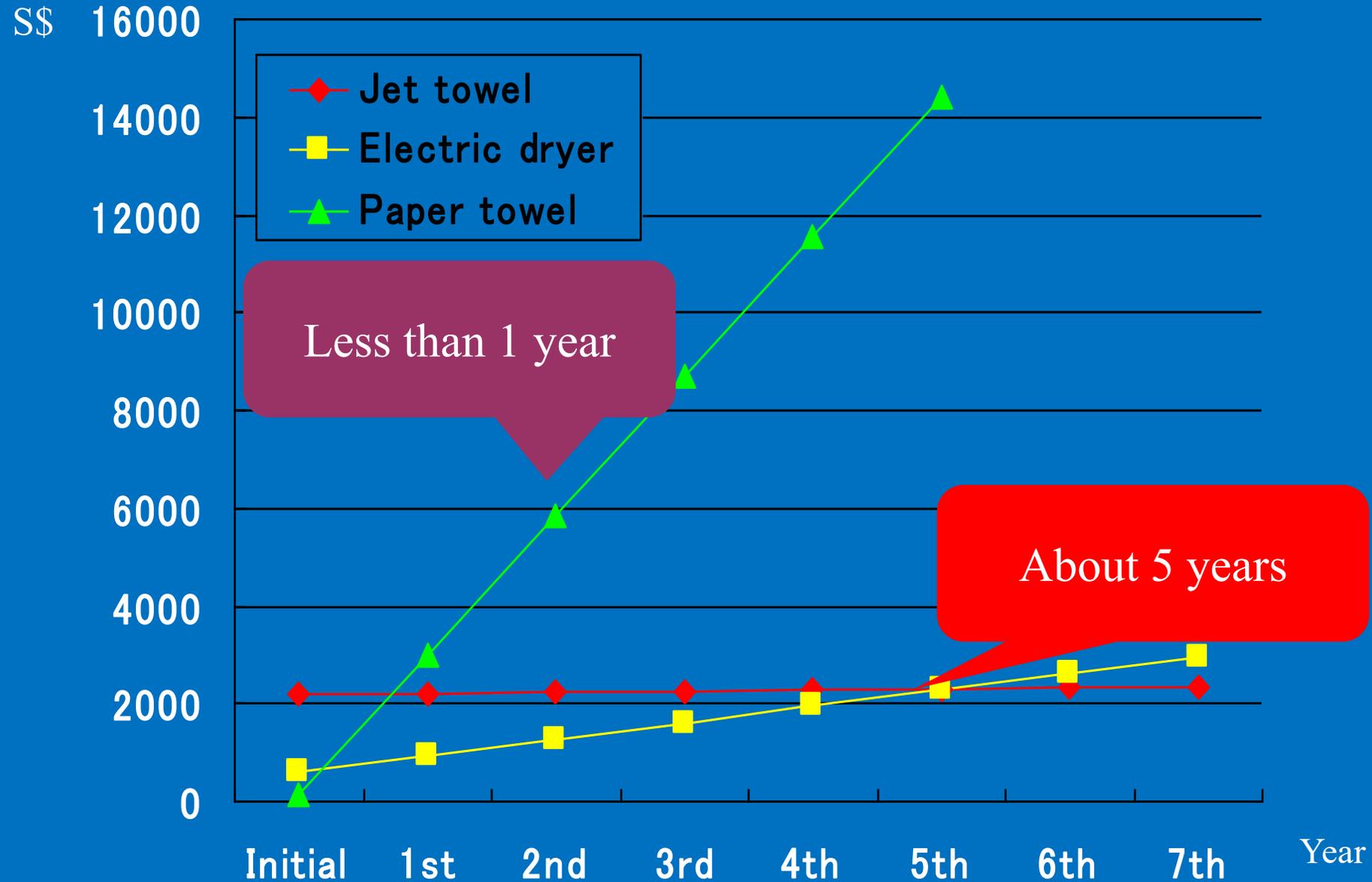
3. Good cost performance

Running Cost of Jet Towel

- The comparison among various Towel in Singapore



Cost simulation



Jet Towel (Hand Dryer)

Compact but powerful, with a protective metal cover
Jet Towel Smart

with heater
JT-S2AP
White/Silver



Yangon International Air Port
JT-S2AP-W-NE x 144 Nos



Jet Towel Smart

The latest evolution of the original dual-jet hand dryer



*Jet Towel Smart Lite available only in white

- Antibacterial surfaces^{††}
- Designed for alcohol cleaning^{††}
- Quiet operation 56dB
- Robust design
- Quick start 0.1sec response
- Protective steel shell^{††}
- PTC heater^{††}

**The Magic Solution
Energy Recovery & Ventilation System**

Lossnay



Why Do We Use Papers for Lossnay?

- A MELNAK engineer was playing with his ground daughter.
- He found a paper can translate heating energy.
- In 1970 HRV Losnay was released first in the world.



Lossnay was born in MITSUBISHI

- A MELNAK engineer was playing with his ground daughter.
- He found a paper can translate heating energy.
- In 1970 HRV Lossnay was released first in the world.



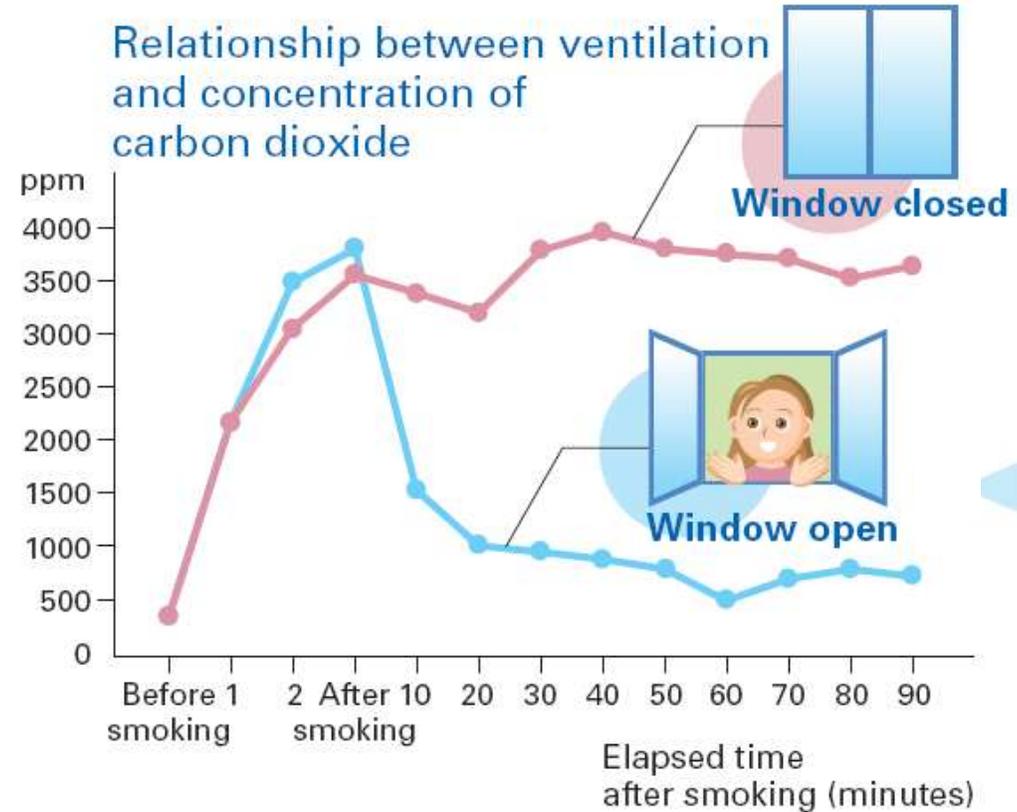
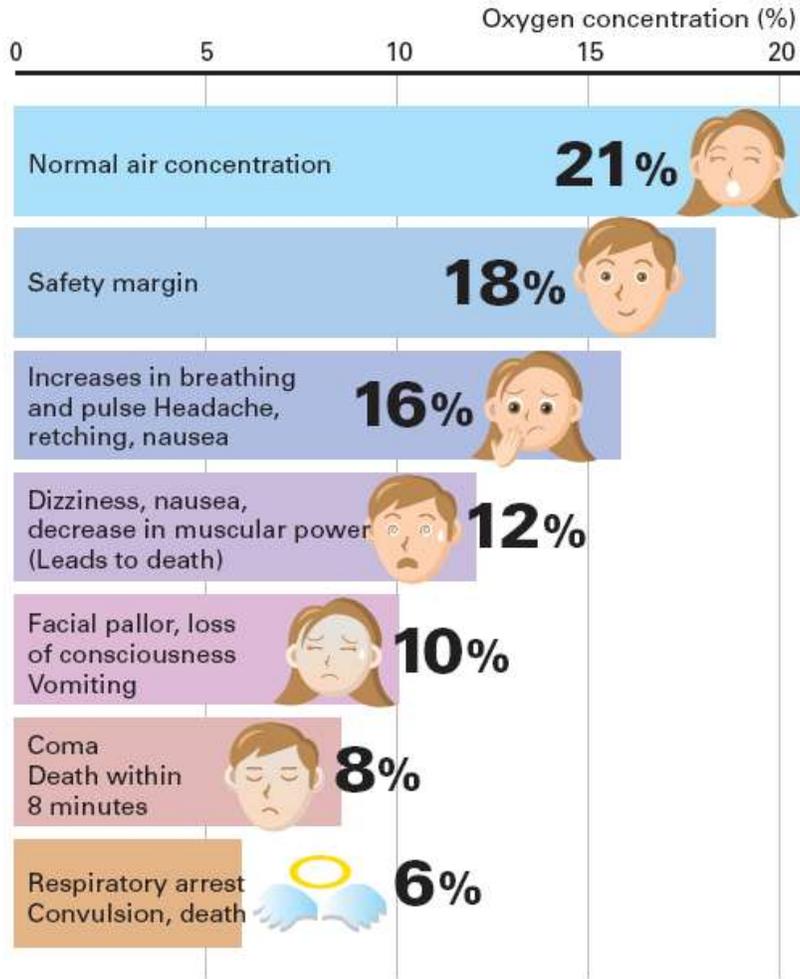
First Prototype of Lossnay



Mr. Yoshino, former MELNAK

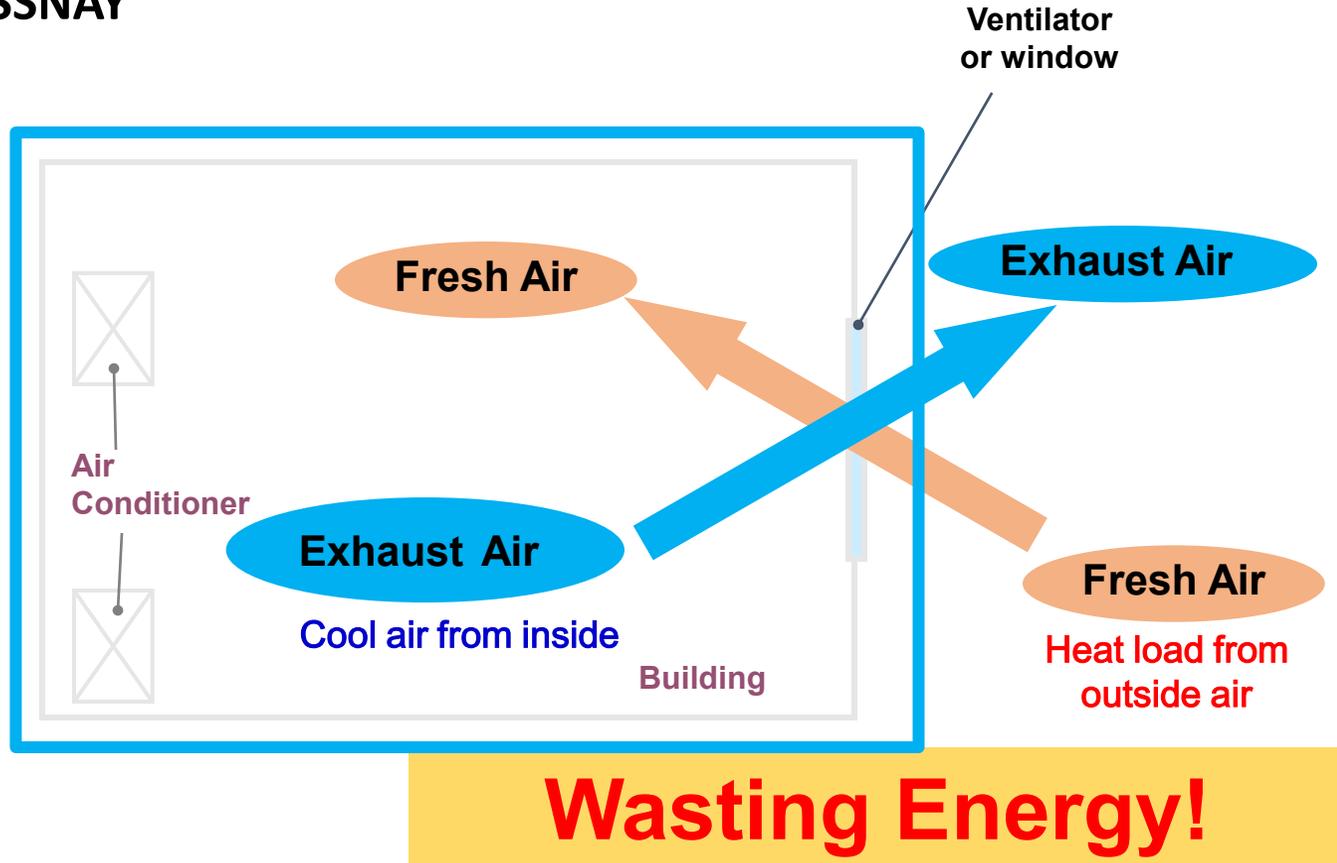
Necessity of ventilation

Oxygen concentration and anoxia



Energy loss caused by Ventilation

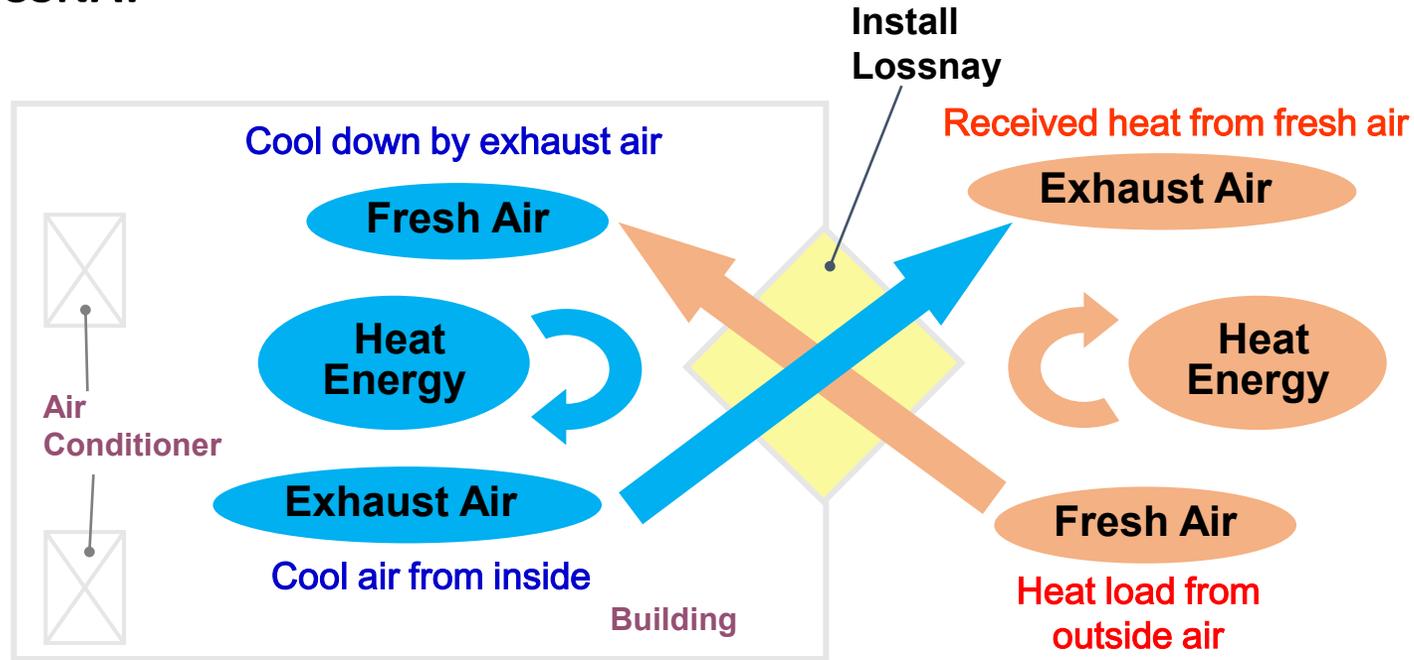
The solution... LOSSNAY



Mechanical ventilation is very effective for air-tight buildings. But it causes loss of energy (heating, air-conditioning load).

Energy loss caused by Ventilation on Cooling Operation

The solution... LOSSNAY



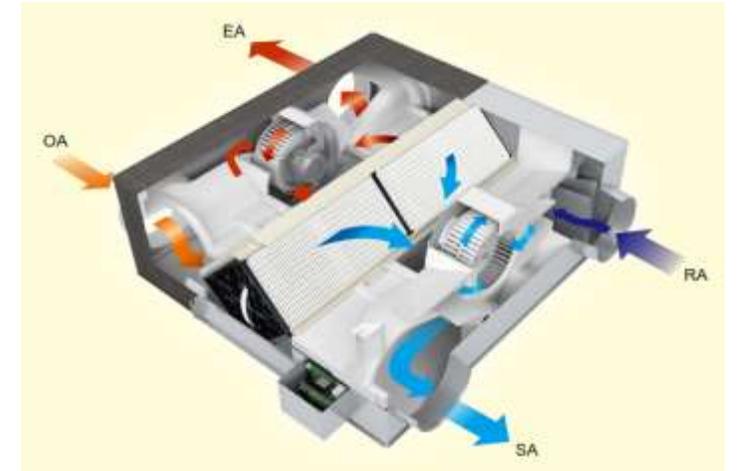
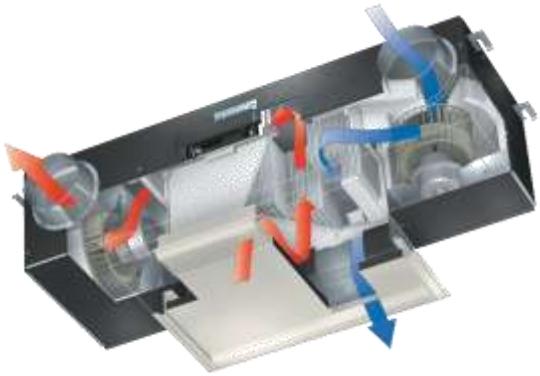
Energy Recovered !!

Temperature exchange efficiency average = 80 %

(depending on model and fan speed)

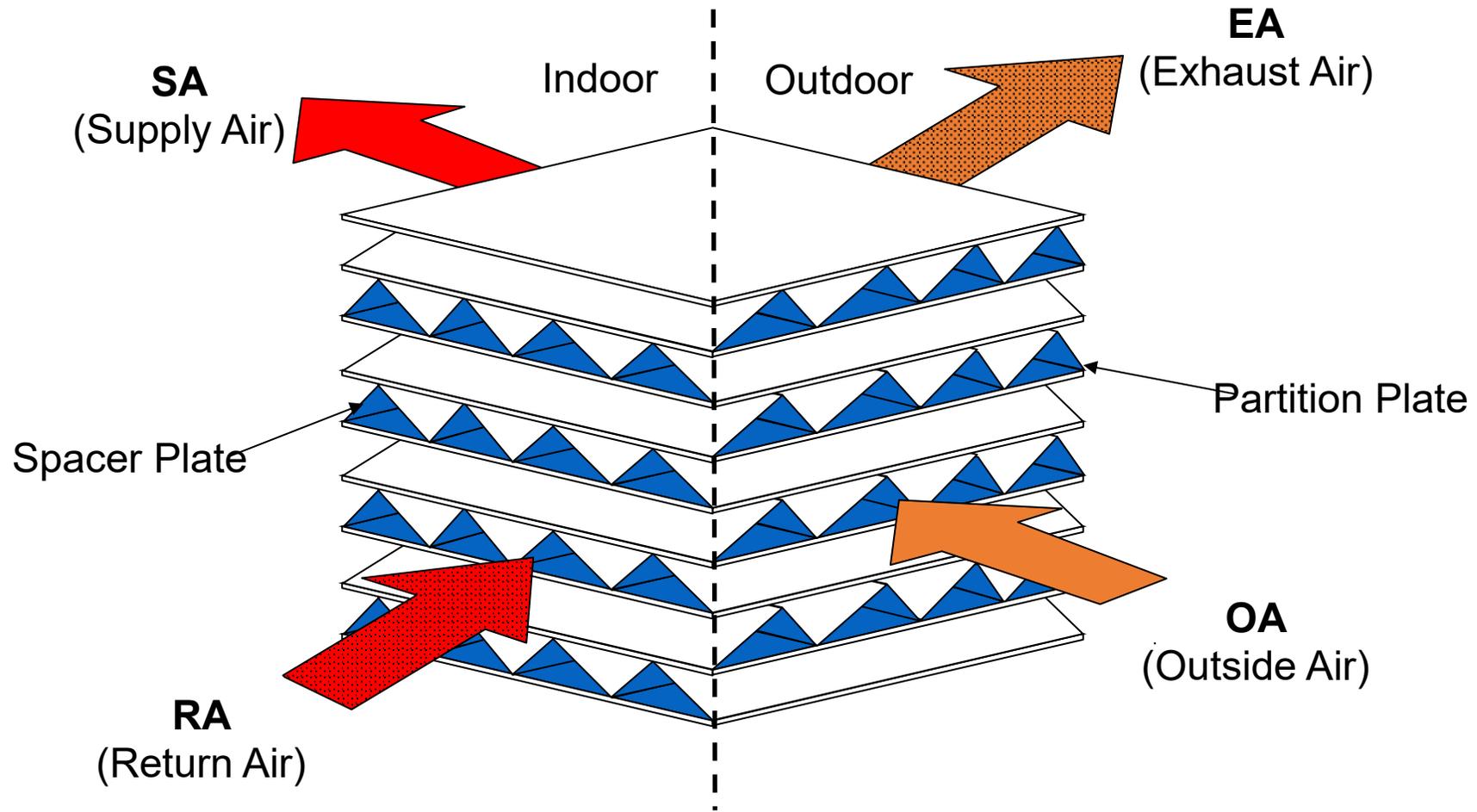
The Magic Solution : Loosnay

Energy Recovery & Ventilation System



Loss + NAI = No Loss
English Japanese

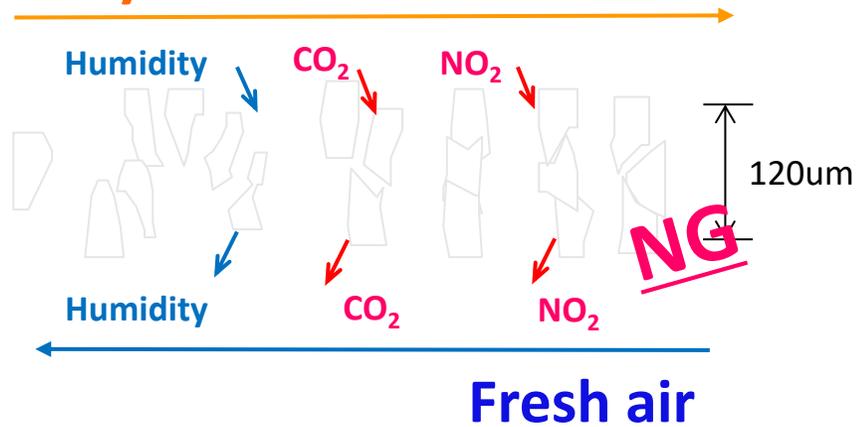
Loosnay Core Construction



Uses Special Papers

Ordinary Paper

Dirty air



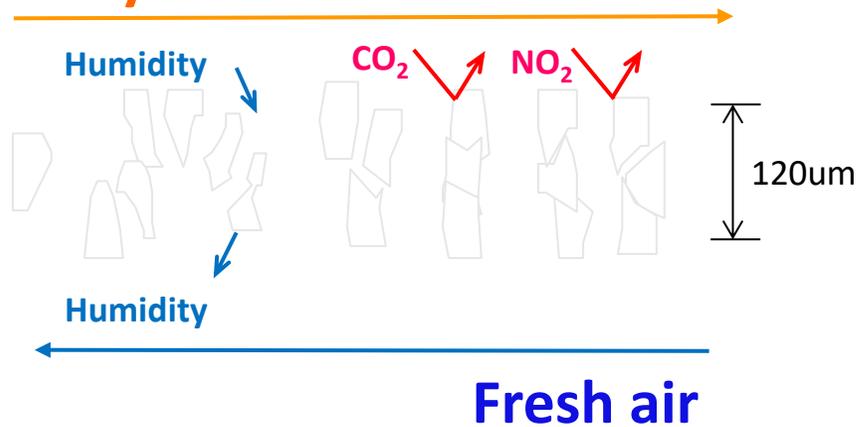
- * The paper Used For photocopy
- * Humidity are transferred
- * CO₂, NO₂ are transferred



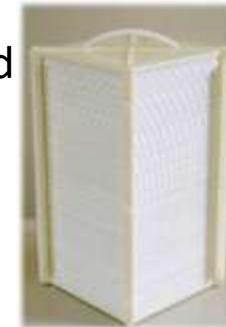
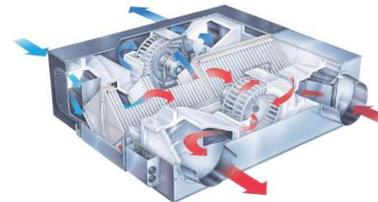
Specially Treated Paper

(Made of Cellulose Fibers)

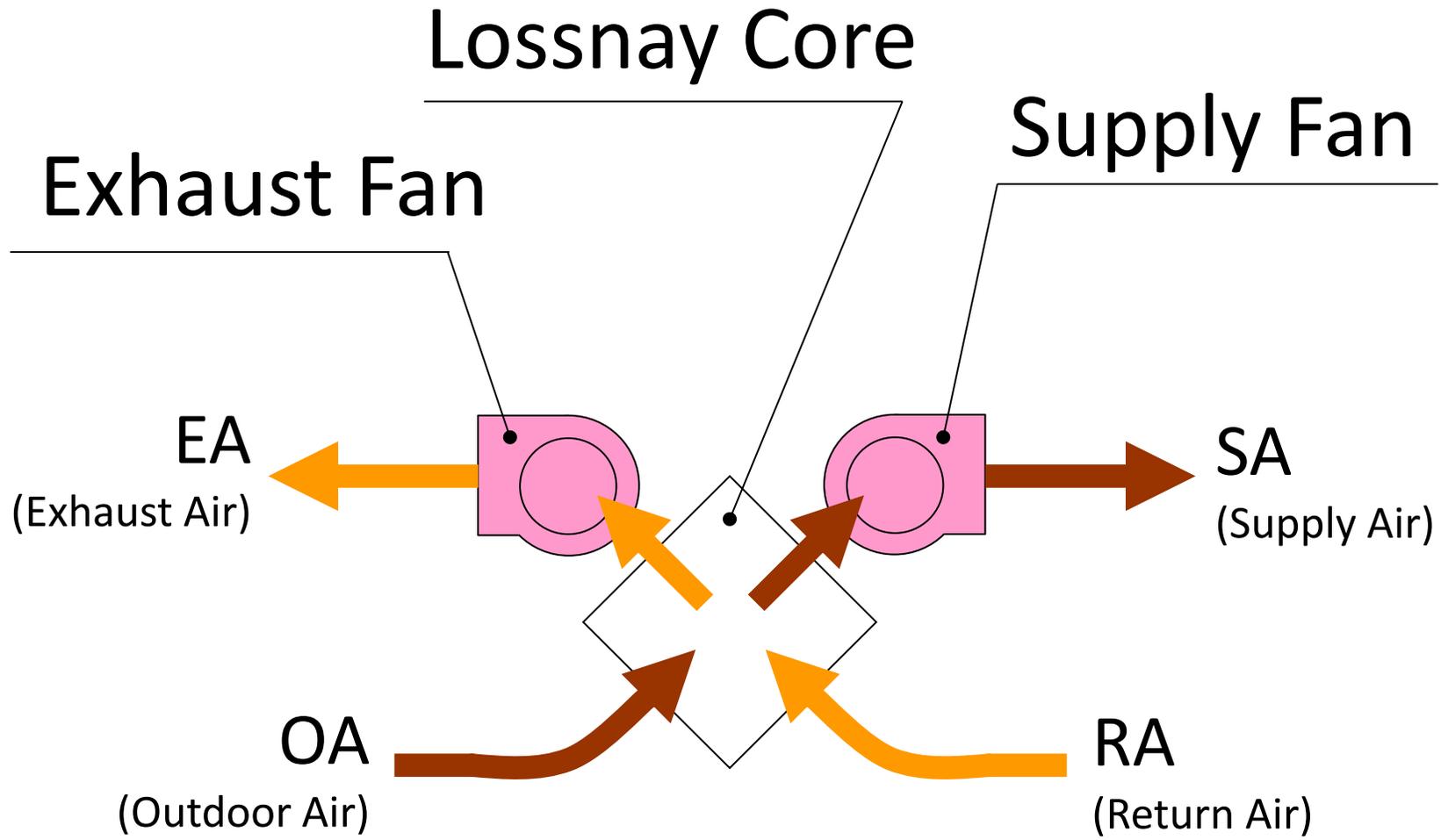
Dirty air



- * The paper Used For Lossnay
- * Humidity are transferred
- * Co₂, NO₂ are Not transferred

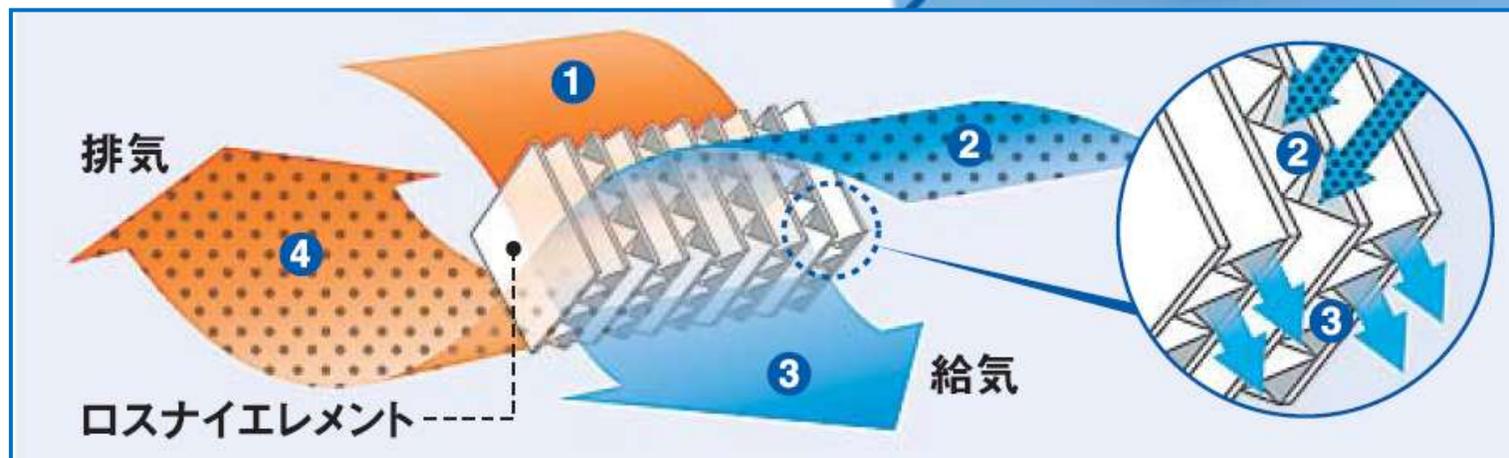
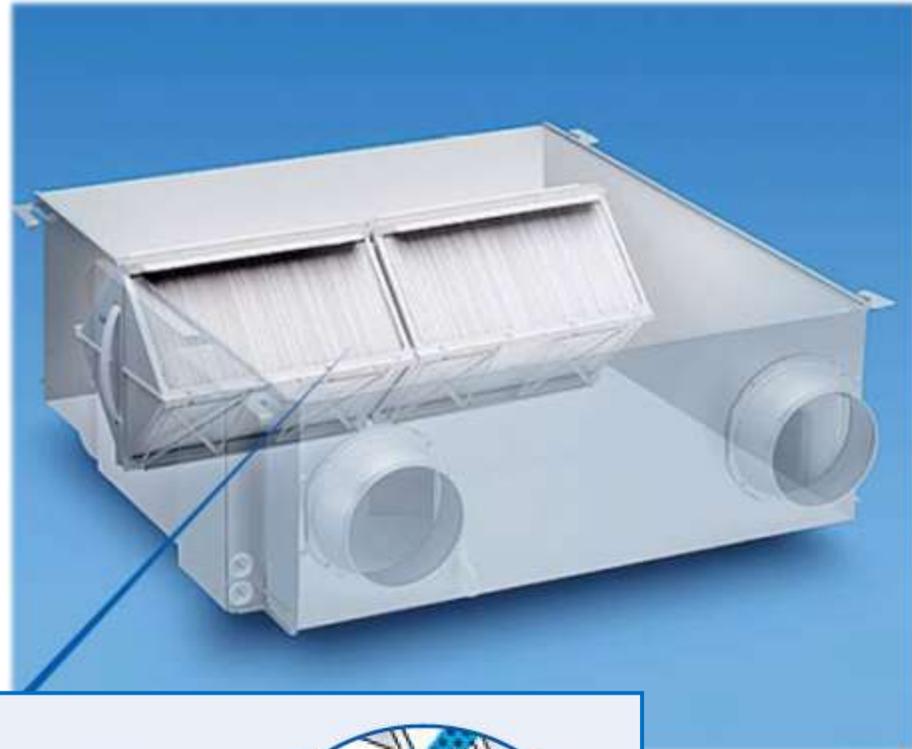


Basic Three Components



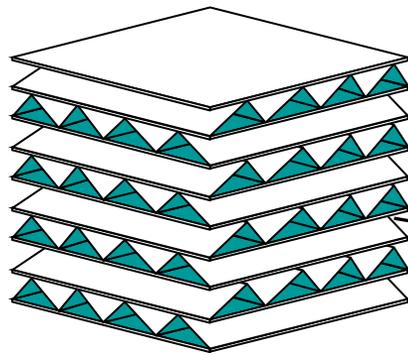
What Material Do We Use?

Lossnay Core
(Made of Papers)

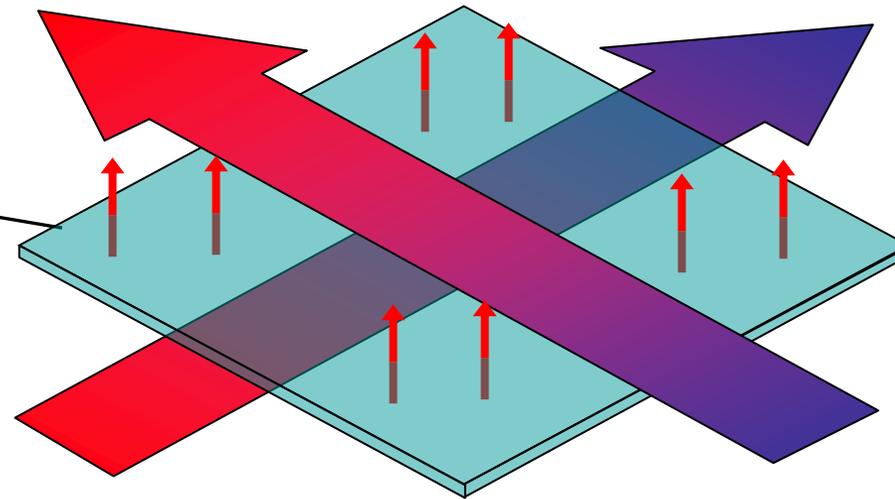


Why Do We Use Papers for Lossnay?

Total Heat Recovery = Sensible Heat + Latent Heat
(Temperature) (Humidity)



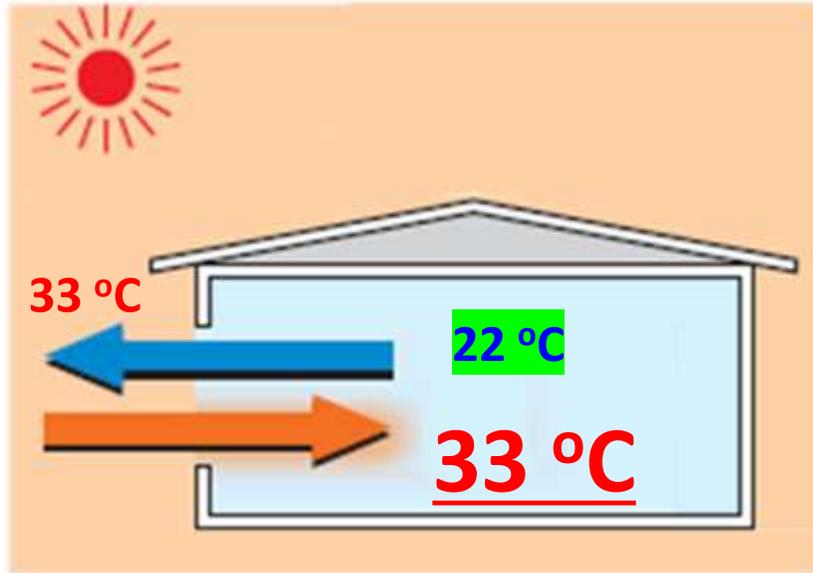
Lossnay Core
(made of papers)



The Magic Solution : Loosnay



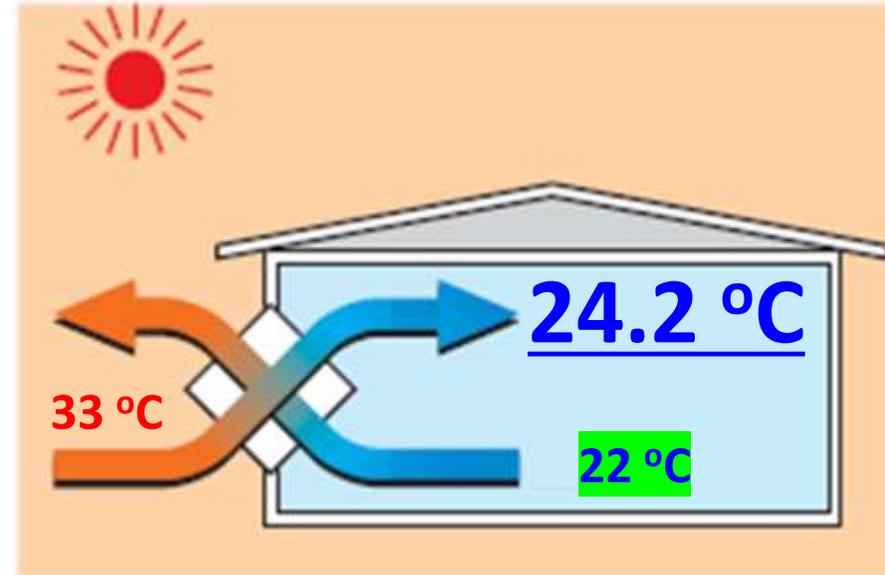
Duct Ventilator



General



LGH-15RX5-E



Loosnay

“Loss” + “Nai” = Loosnay
(Nai means No in Japanese)

Energy Savings



How Much Does Lossnay Save Energy ?

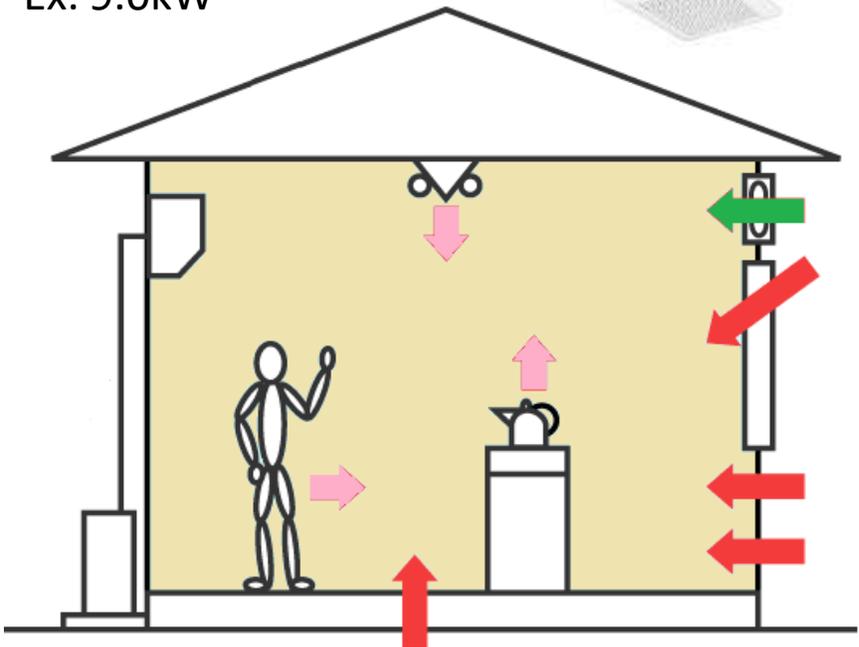


(Calculated model: Office building, Faced South, Middle Floor)



Ex. 9.0kW

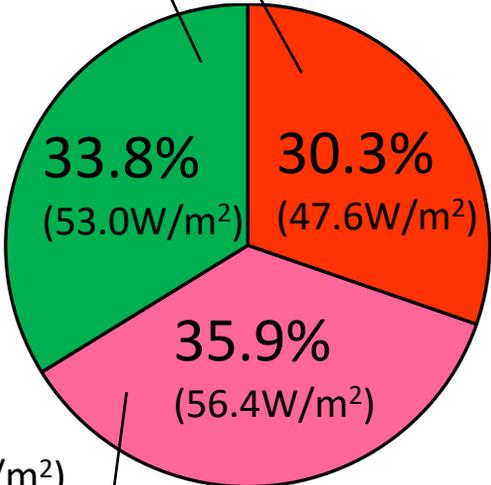
Duct Ventilator



Intaked by Ventilator

Heated from Outside

- * Wall, Floor, Ceiling
- * Sunlight



Total (157.0W/m²)

Heated from Inside

- * Human
- * Lightning
- * Home appliances

Heat Load (In Summer)

How Much Does Lossnay Save Energy ?



(Calculated model: Office building, Faced South, Middle Floor)

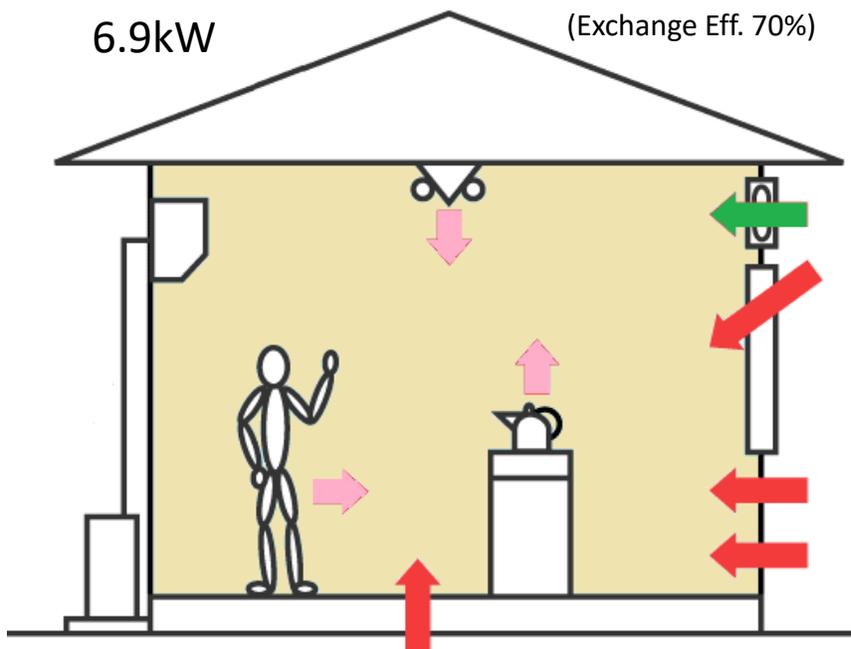


Ex. ~~9.0kW~~
6.9kW

Lossnay



(Exchange Eff. 70%)

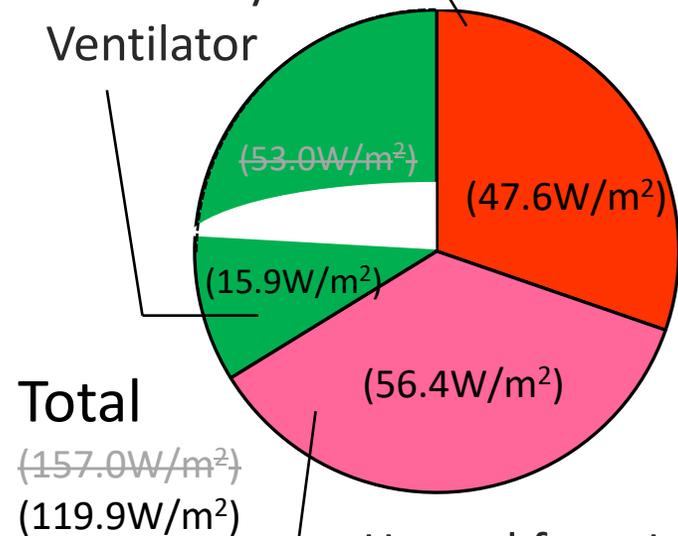


When we chose Lossnay

- * Intaked by Ventilator... Saved 70%
- * Total Heat Load... Saved 23%

Heated from Outside
* Wall, Floor, Ceiling
* Sunlight

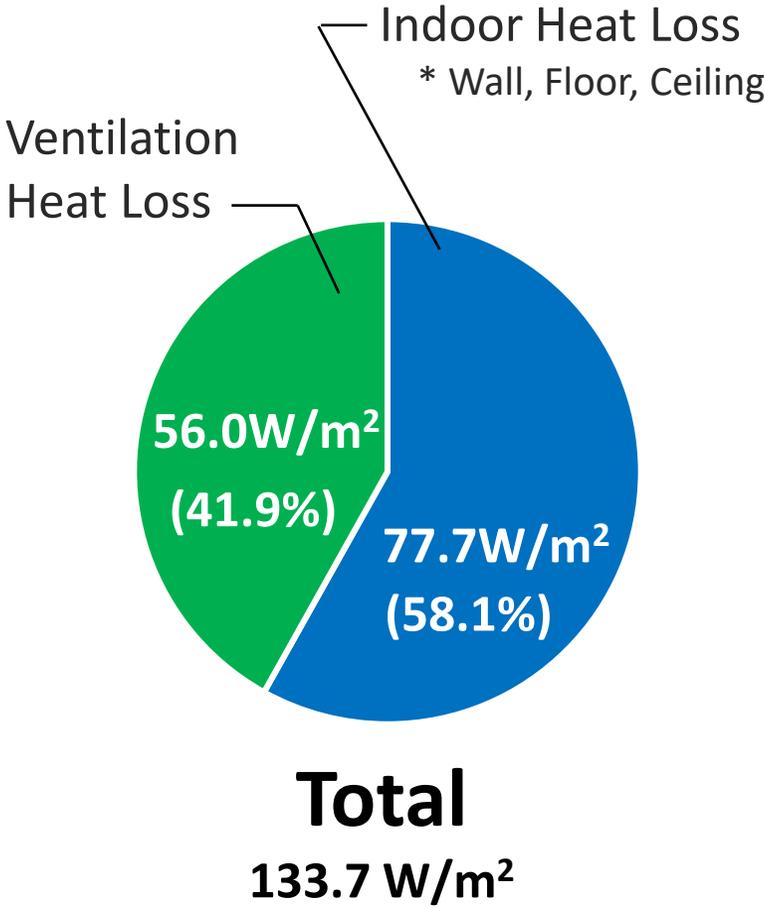
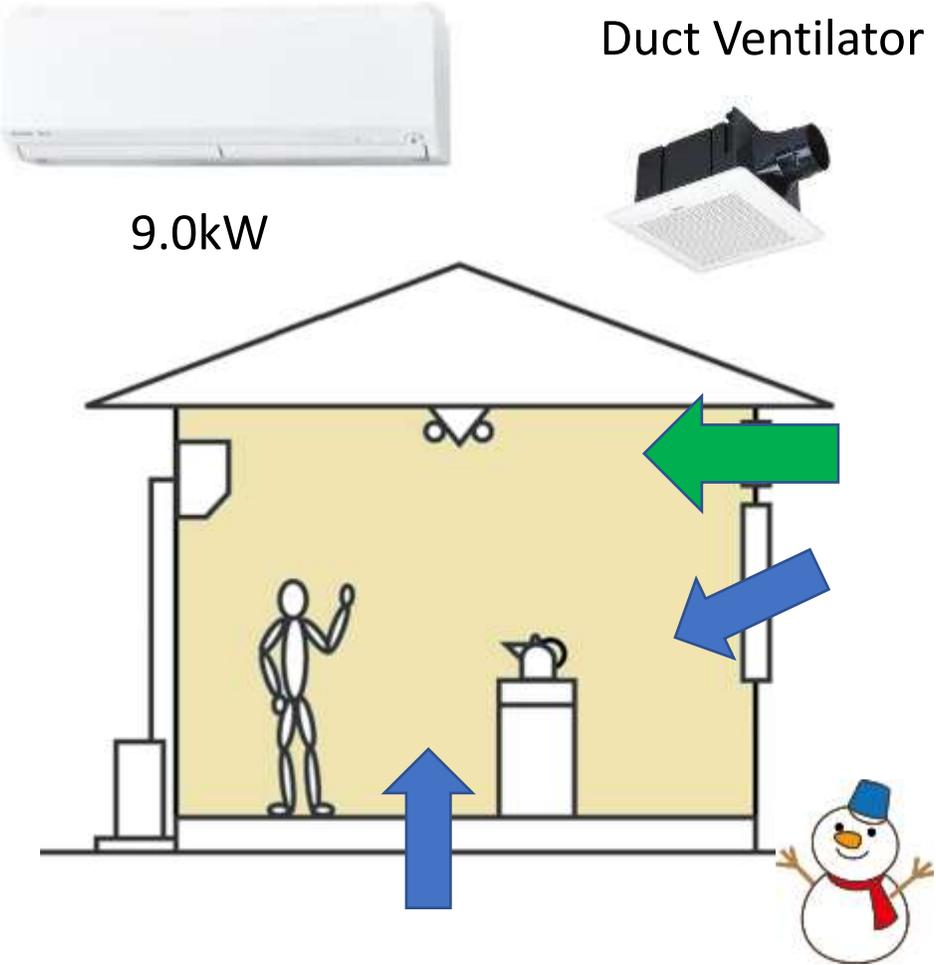
Intaked by Ventilator



Heated from Inside
* Human
* Lightning
* Home appliances

Heat Load (In Summer)

How Much Does Lossnay Save Energy ?

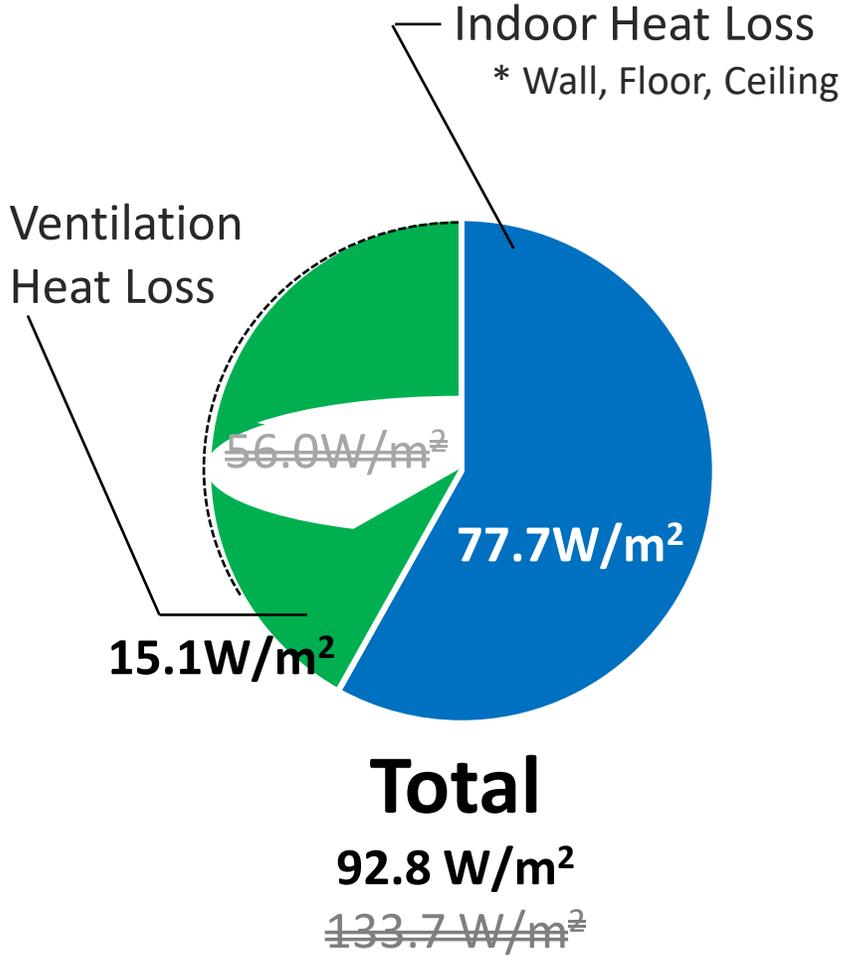
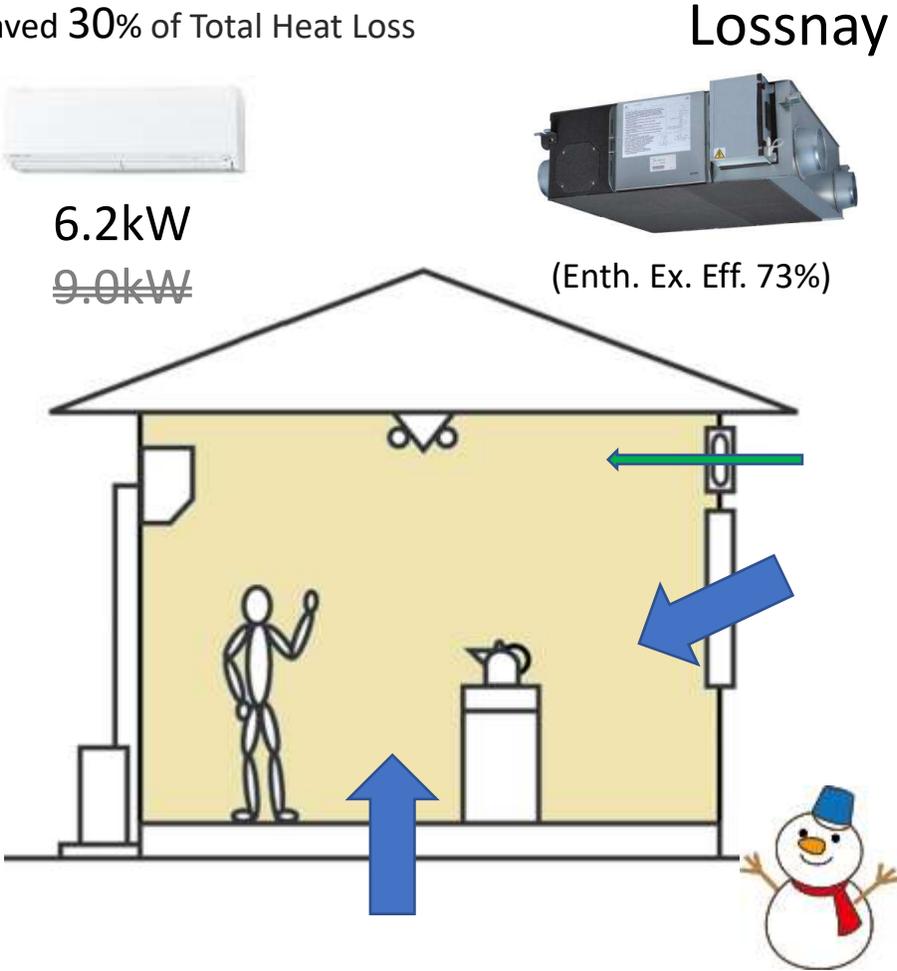


*1 Calculated Model Building: Office building, Faced South, Middle Floor
*2 OA: 0°C, 50% RA : 20°C, 50% *3 Floor Area:

How Much Does Lossnay Save Energy ?

* Saved 73% of Ventilation Heat Loss

* Saved 30% of Total Heat Loss



*1 Calculated Model Building: Office building, Faced South, Middle Floor
*2 OA: 0°C, 50% RA : 20°C, 50% *3 Floor Area:67m²

Intake Fresh Air (PM2.5 Filter)



PM2.5 is quite very serious problem in China



- Major cause is **from traffic, factory** and **power plant**.
 - China works as the factory in the world.
 - 1.23 million people died due to PM2.5 in 2010.
 - It occupies 15% of total number of deaths in China.
- (出典：“Kyodonews(共同通信)” April,2013)



Requiring Higher Air Quality



In Hong Kong

Cause

- Automobiles (Car, Bus, Truck)
- Industrial Facilities (Factory, Electric generation plant)

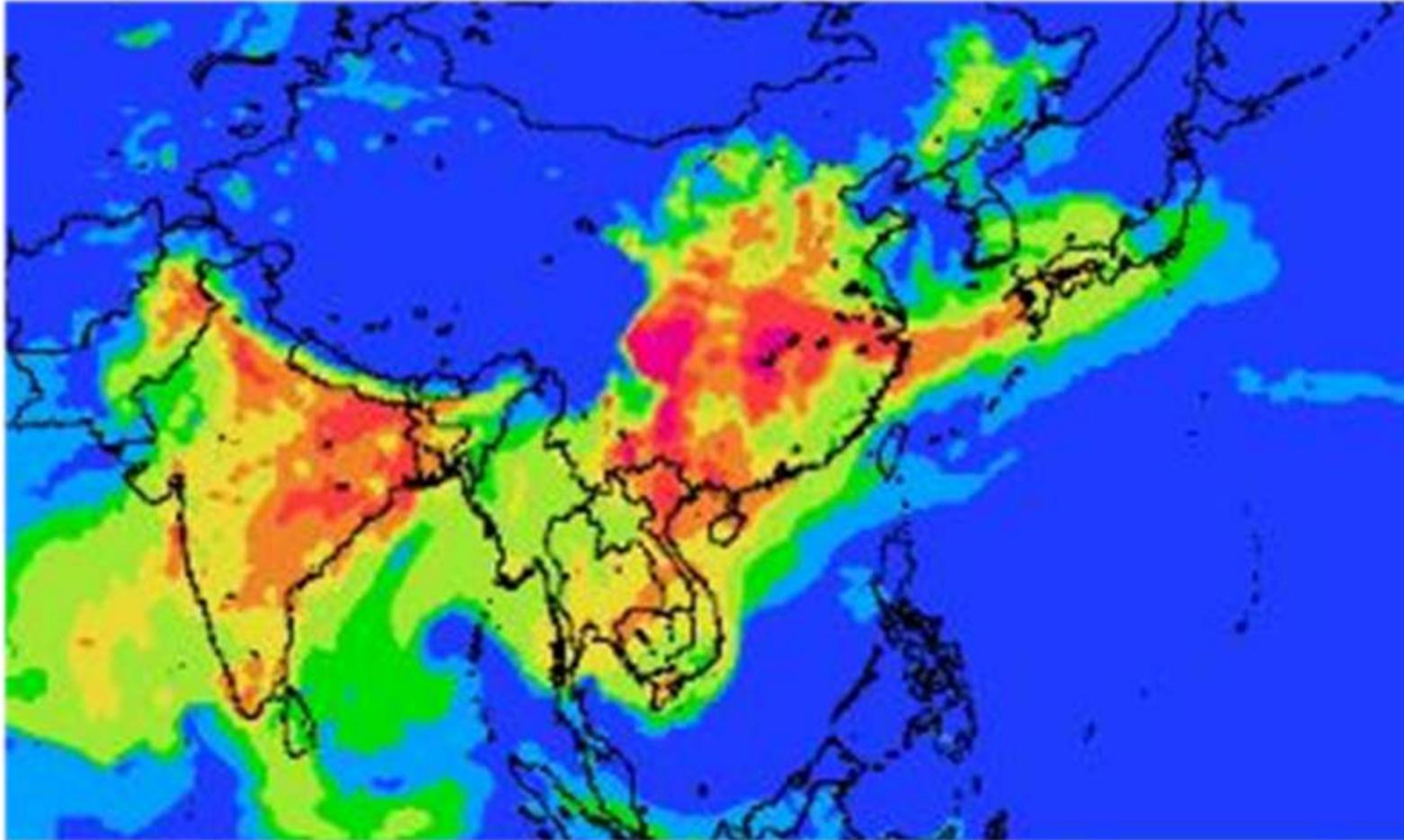
Trend

- Several measures are taken for better air quality.
(Eco-friendly regularization for car, Diesel taxi → LPG taxi)



PM2.5 is serious problem **Across Asia** now

Low  High

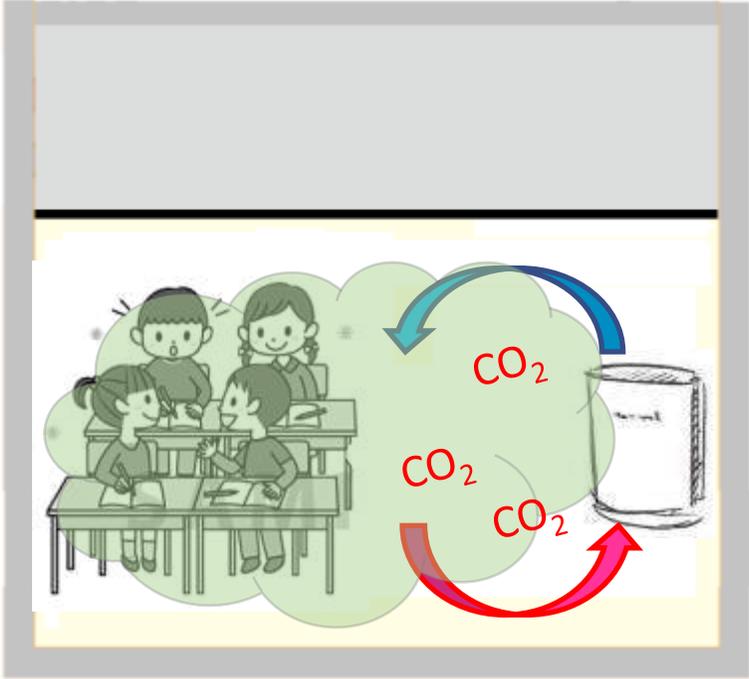


- PM2.5 problem is originally from Factories and Exhausted gas.
- It cause serious disease to breathing equipment(respiratory apparatus) and heart.

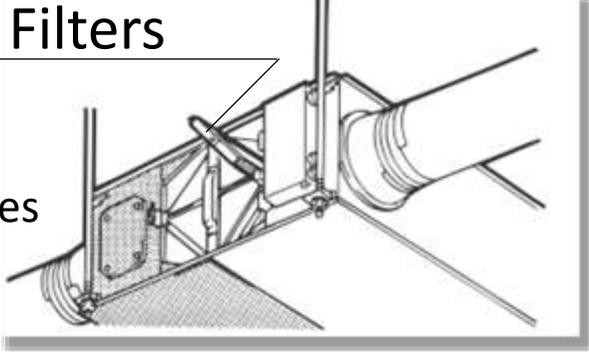
Lossnay provides more better indoor air quality

- Common question from markets
- When it comes to CO₂ and Ammonium, ...?

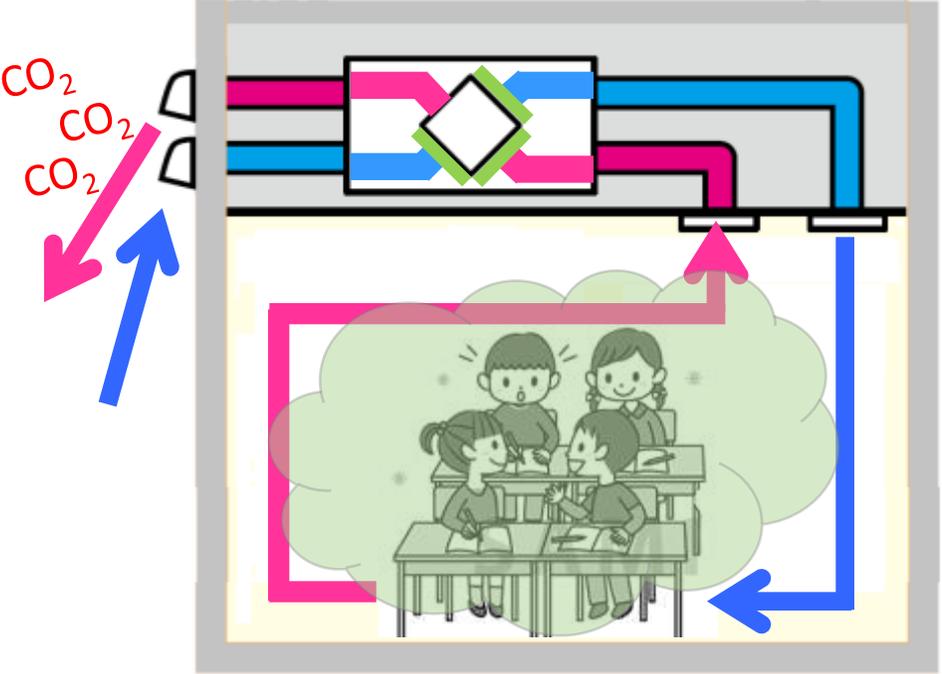
- *Internal Circulation
- *Easy Installation



Air Purifier

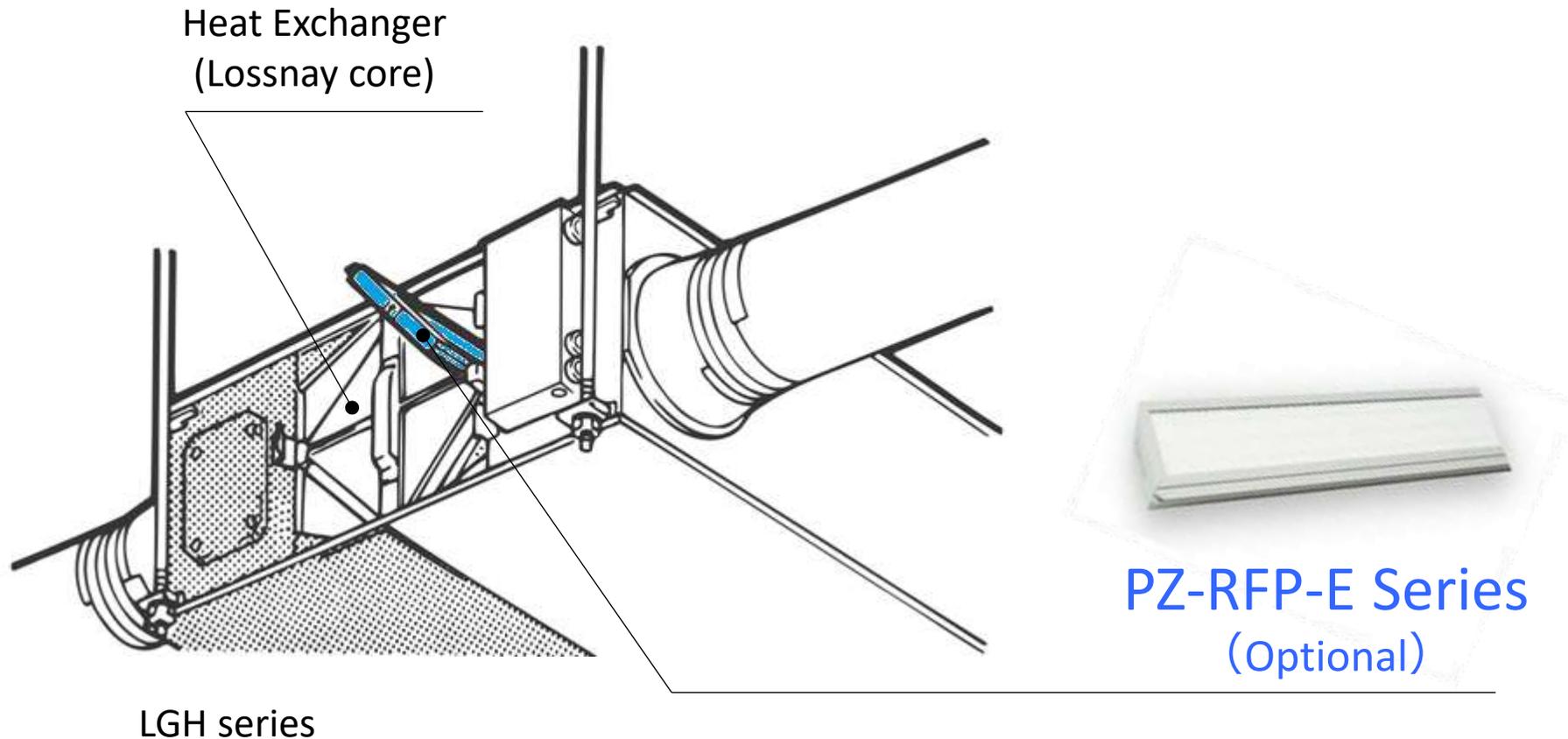


*Can Intake Cleaned Fresh Air



Lossnay

Not Only Saves Energy, But **Intakes Cleaned Fresh Air**

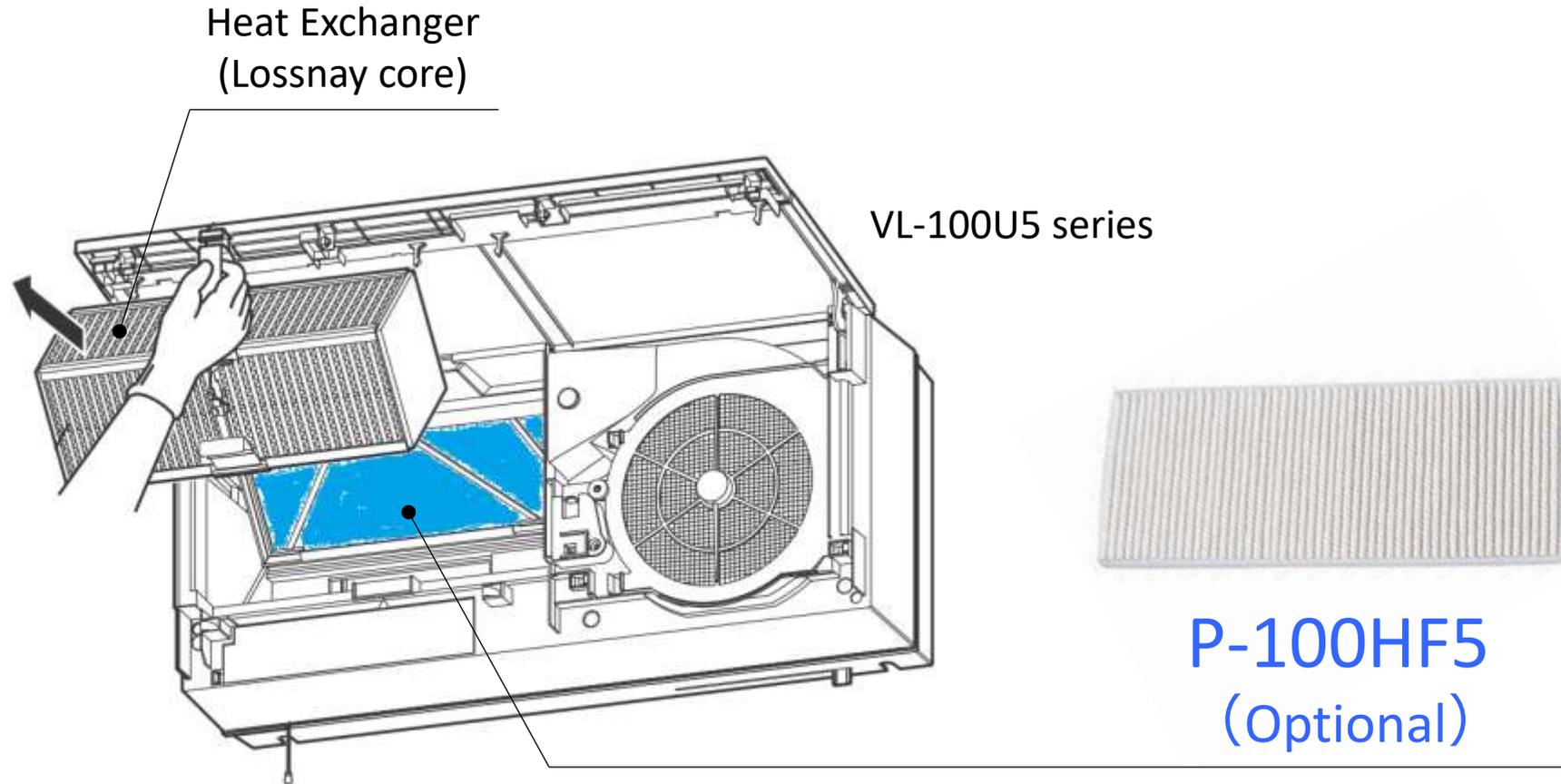


Filtering Performance: Approx. **95%**

*Measured on PM2.0 μ m particles.

*PM2.0 μ m is know as quite small particles mainly produced in cars and industrial fields.

Not Only Saves Energy, But Intakes Cleaned Fresh Air

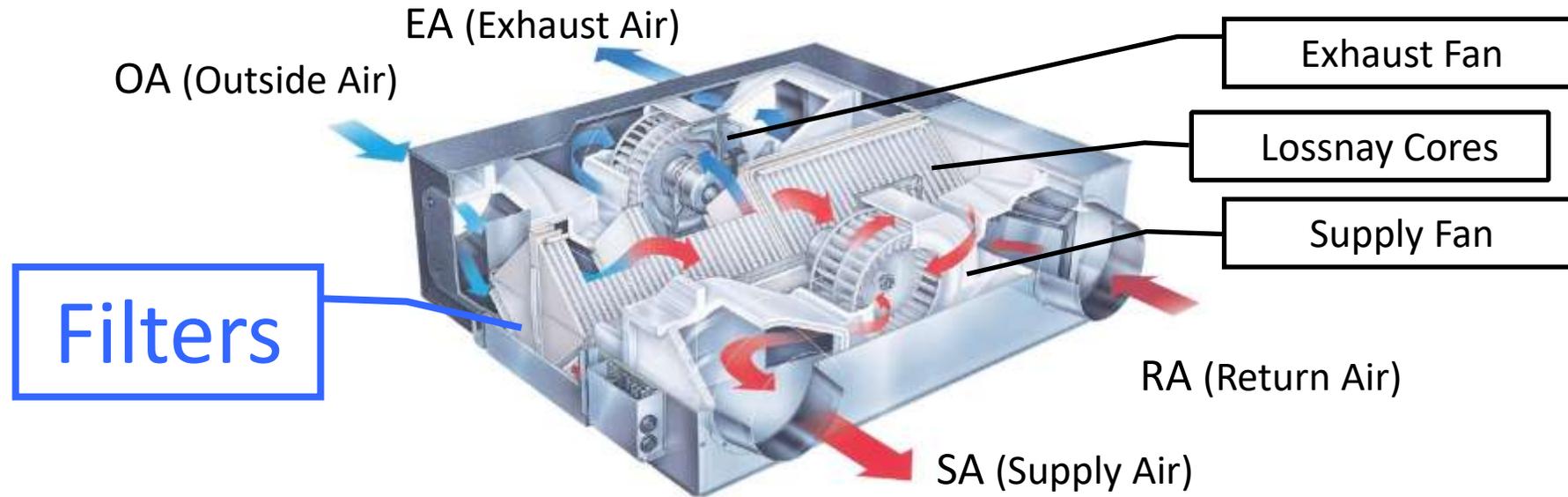


Filtering Performance: Approx. **95%**

*Measured on PM2.0 μ m particles.

*PM2.0 μ m is know as quite small particles mainly produced in cars and industrial fields.

Optional Filters Provide More Cleaned Fresh Air



Standard Filter

-G3 Class
(EU standard, EN779: 2012)



<Option>

High Efficiency Filter

-M6 Class
(EU standard, EN779: 2012)

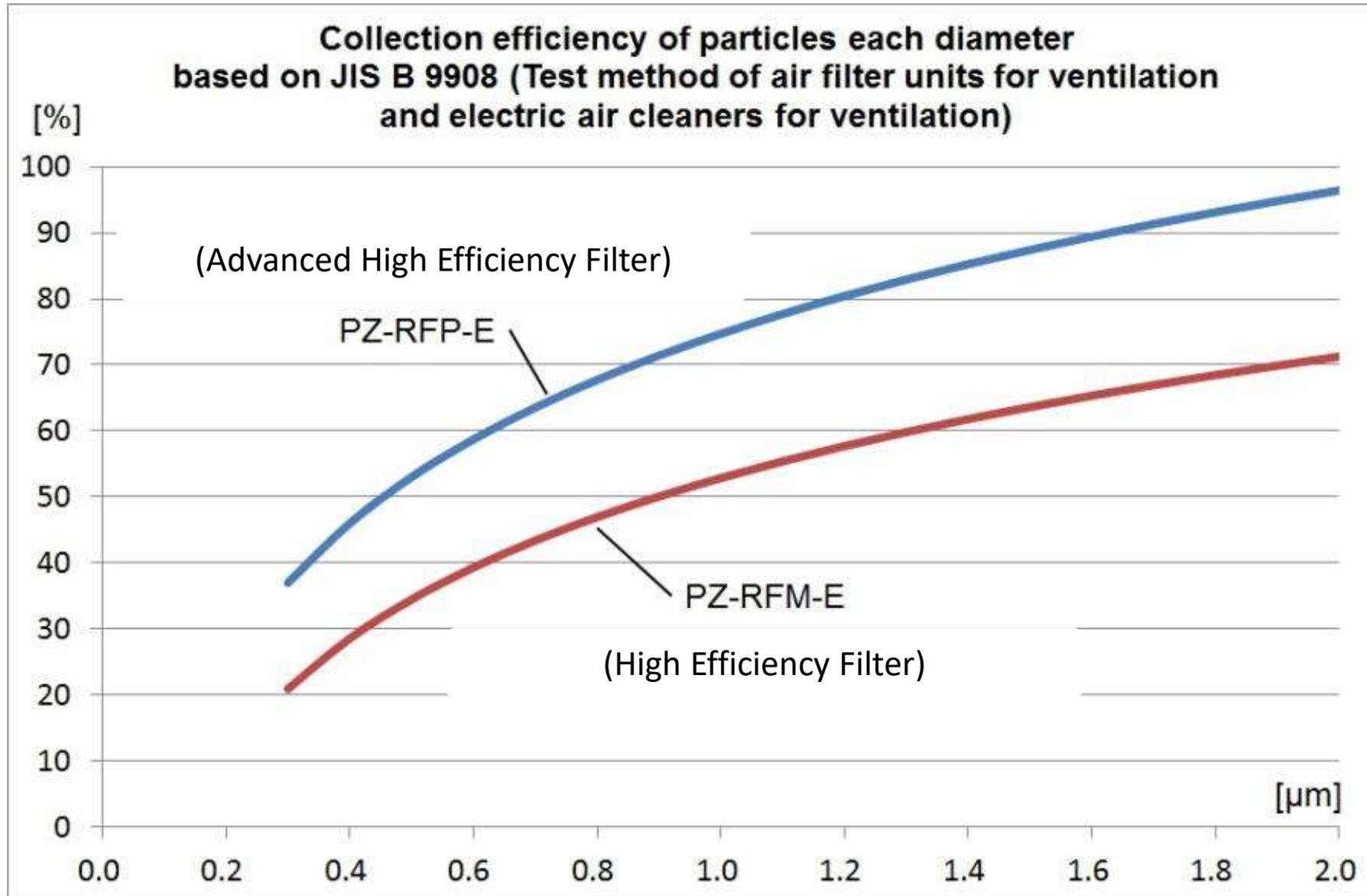


<Option>

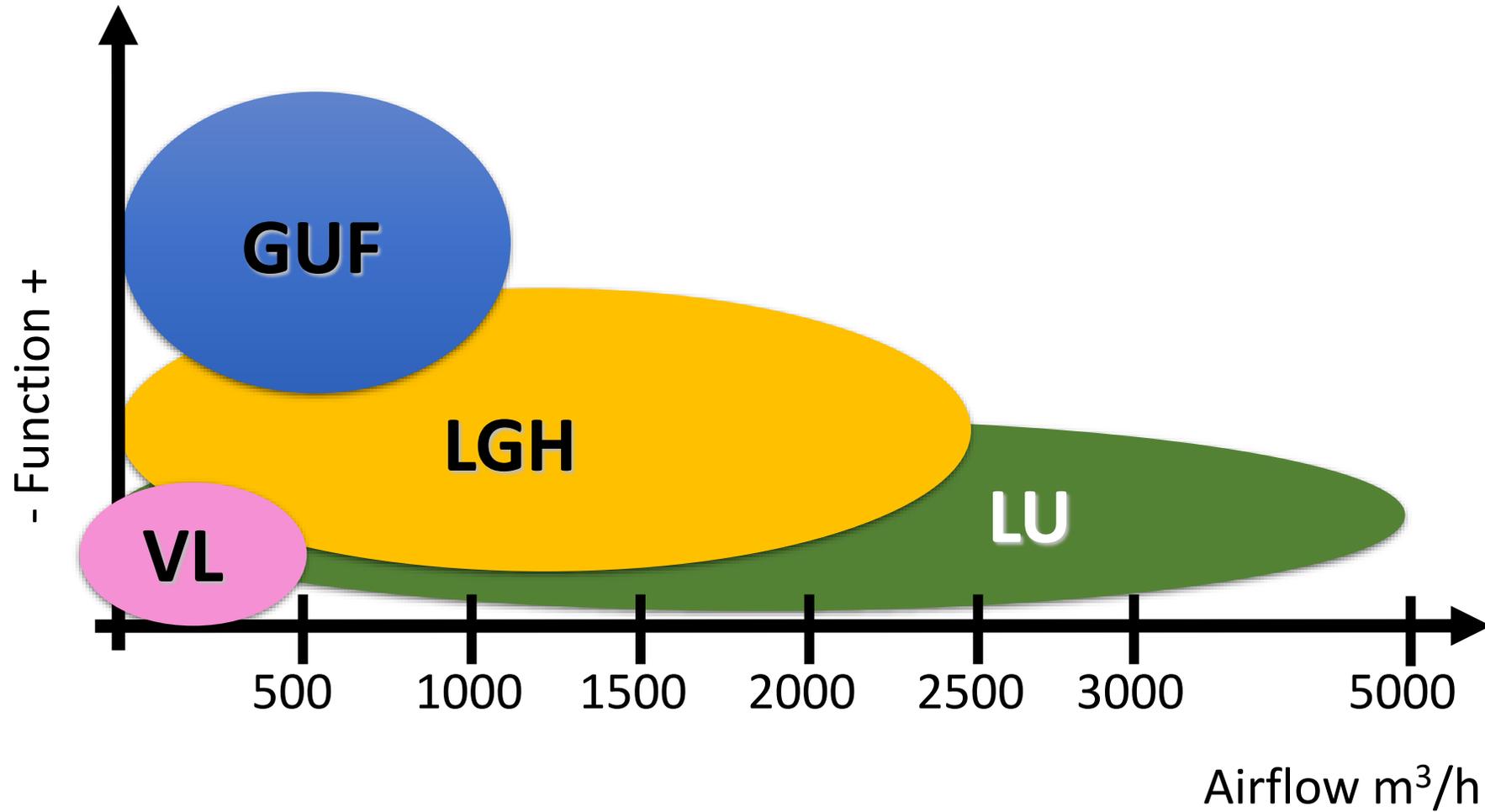
Advanced High Efficiency Filter



RFP has higher performance than RFM



Offering Four Line up



Four Line Up for Overseas Market

1. LGH Series; LGH-15-200RX5, 15-100RS5



- 150 ~ 2,000m³/h (9 Models)=RX5 Delux
- 150~ 1,000m³/h (7Models)=RS5 Standard
- Commercial

2. GUF Series; GUF-50, 100RD3, RDH3



- 500 & 1,000 m³/h (4 Models)
- Commercial
- Connect to City-Multi outdoor unit

3. LU Series; LU-500~505



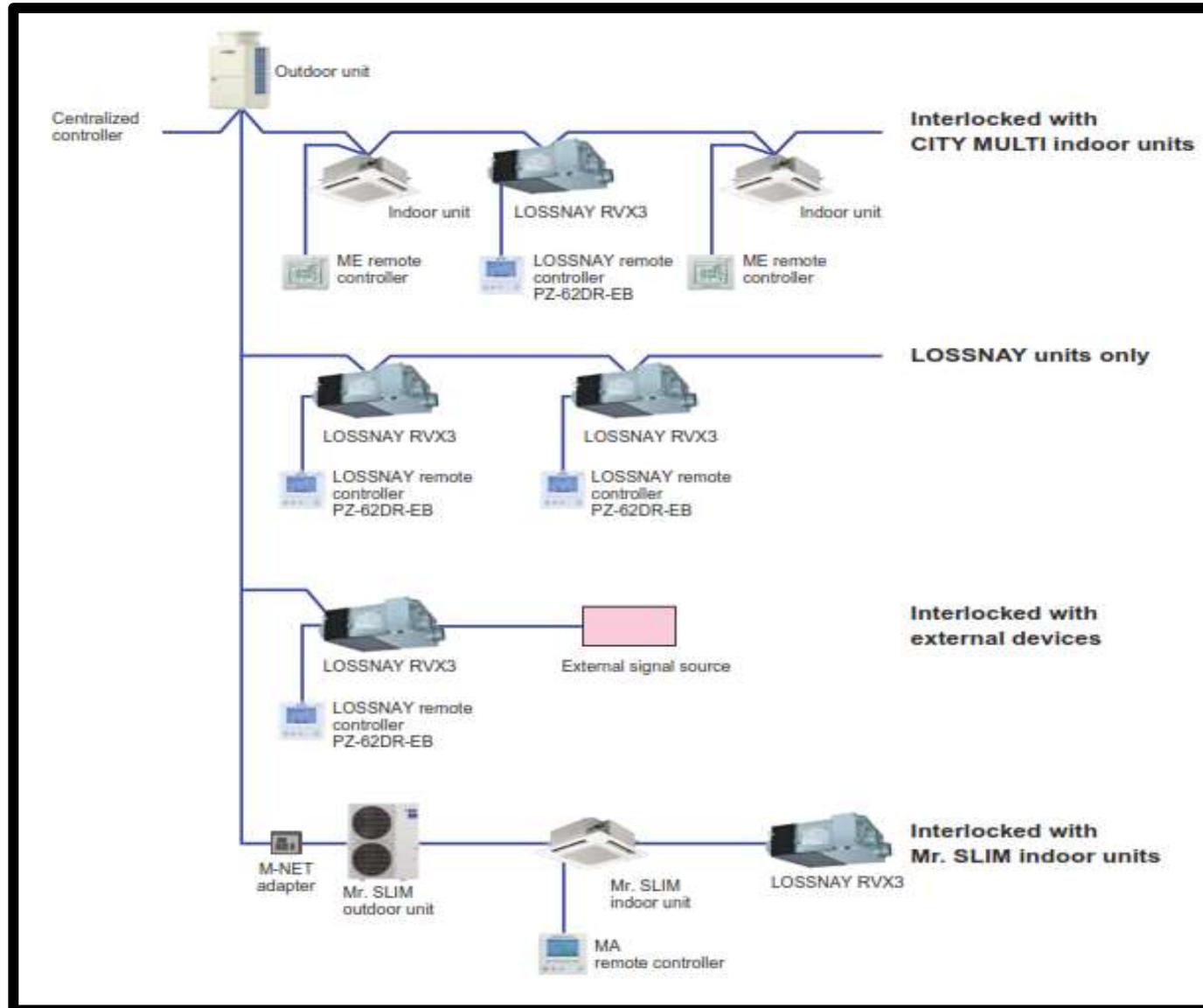
- 5,000 ~ 25,000 m³/h
- Heat exchanger only
- Industrial use for AHU
- Able to be combined with up to 5 units

4. VL Series; VL-100U5



- 100 m³/h
- Residential use(one room use)
or small office use

Centralized Controller System



History of CITY MULTI



1984 **Japan**

Launch of the CITY MULTI series of variable refrigerant flow (VRF) air-conditioning systems.

1992

Export of CITY MULTI begins.

2010 **Overseas**



YHA-series

2014 **Overseas**



YKA-series



YKD-series

2019 **Overseas**

Key parts are improved to create high performance modules.



YKE-series

2024 **Overseas**

The latest in the series achieves even higher energy efficiency.

Centralized controller with 12.1-in color LCD touch panel
AE-C400

R410A

CITY MULTI PRODUCT LAUNCH

YKE-Series



Mitsubishi Electric Quality

Under its quality first principle, Mitsubishi Electric is creating products with an unwavering commitment to quality, producing air conditioning systems that provide comfortable spaces for people around the world.

COMFORT

Beyond creating a comfortable environment, we aim to achieve harmony between users and their surroundings.

EFFICIENCY

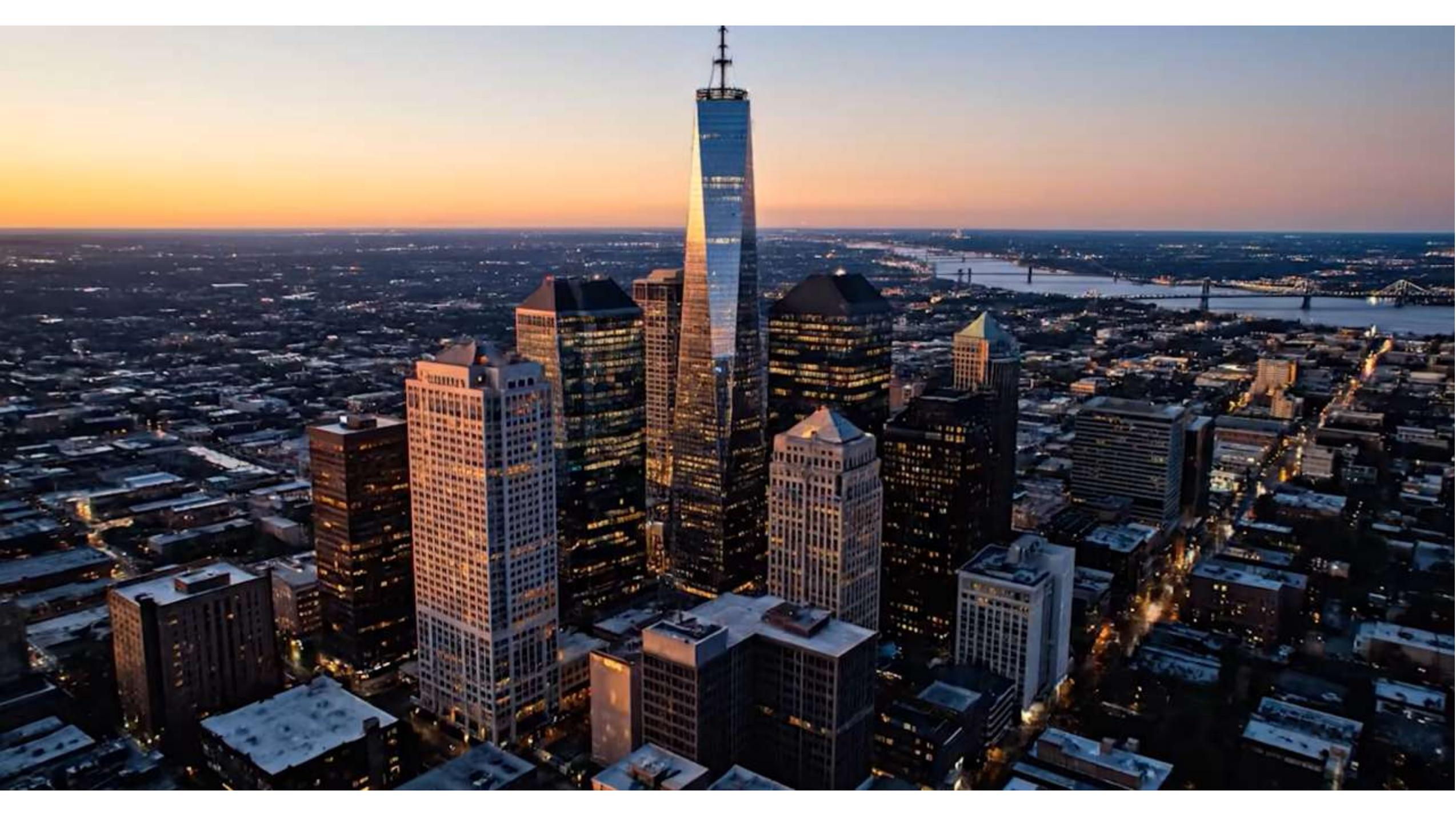
We strive to achieve optimum cost performance by continuously reducing energy requirements and improving eco-friendliness.

DURABILITY

Our products are subjected to rigorous testing under harsh conditions that are more extreme than that of the real world to ensure years of reliable service.

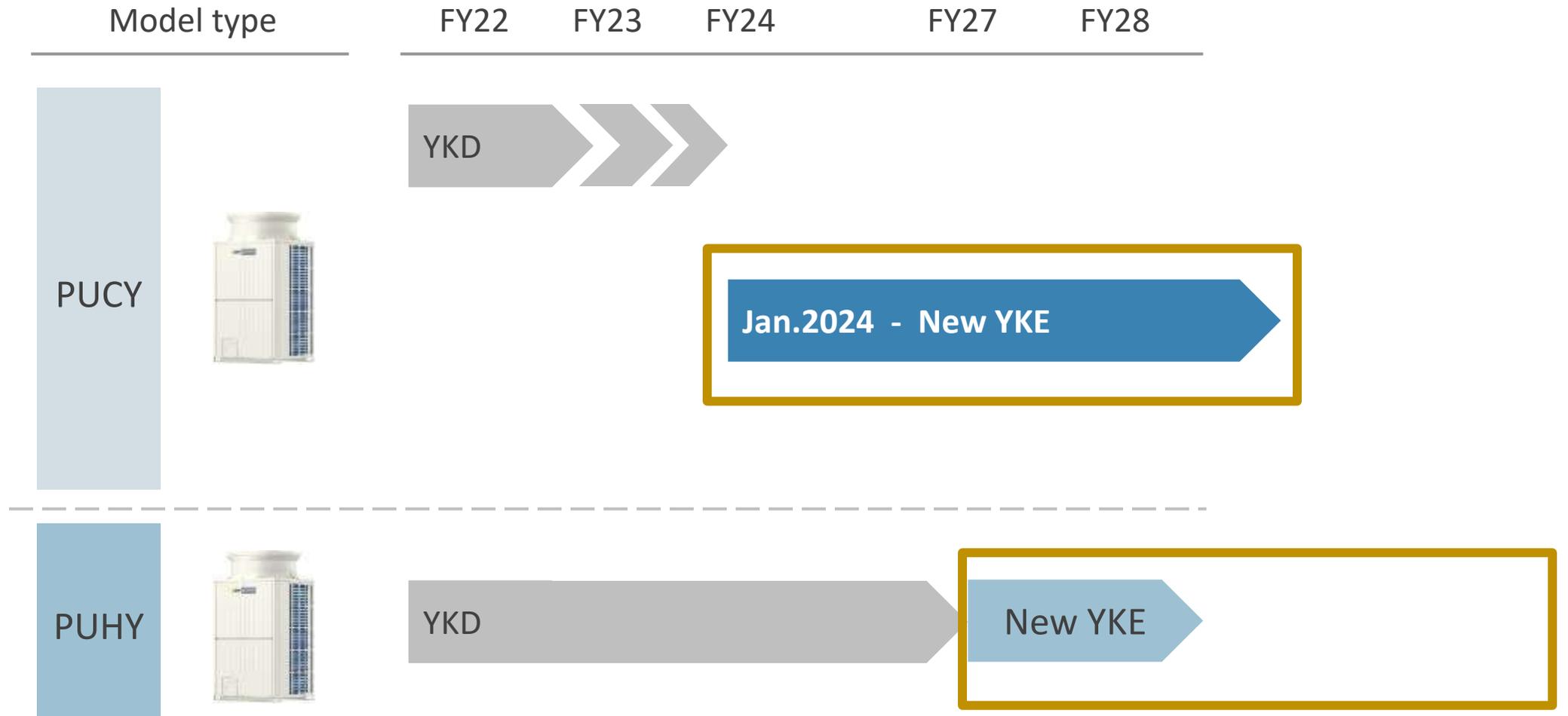
Mitsubishi
Electric
Quality





Introduction

Line-up



Introduction

Line-up

PUCY

High Efficiency



EP-YKE

Highest efficiency model, achieving high IEER (Tick) rating

High standard
Combination of Standard model



EP-YSKD



GP-YSKE

High Standard
Combination of Standard model
achieve better EER than standard

Standard



P-YKD



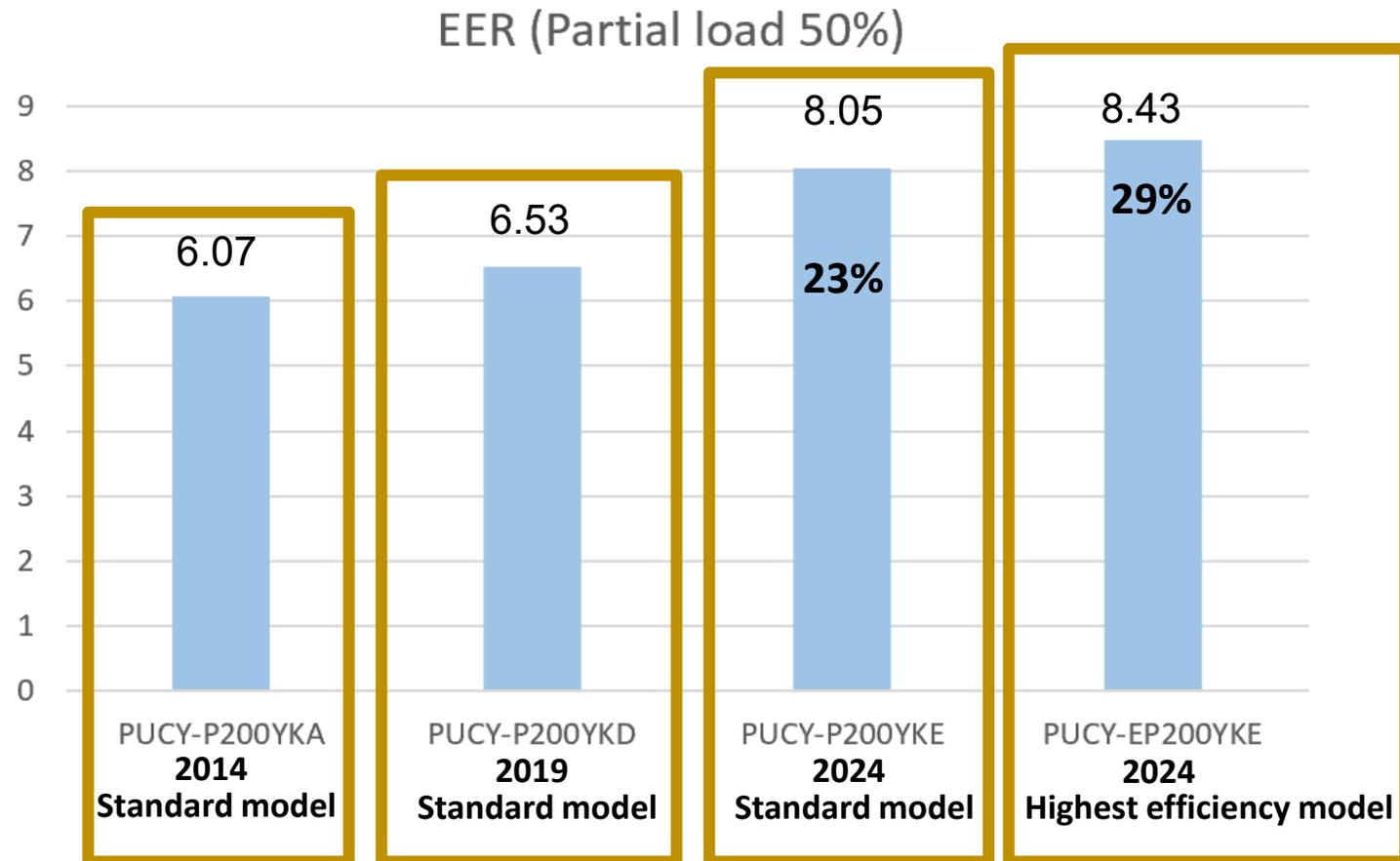
P-YKE

Standard COP model, price competitive lineup

Performance

EER comparison

P-YKE achieves 23% higher partial load at 50%



MFC HEX (Multi Flow Condenser)

MFC HEX

Aluminum MFC tube

Heat transfer area space increase

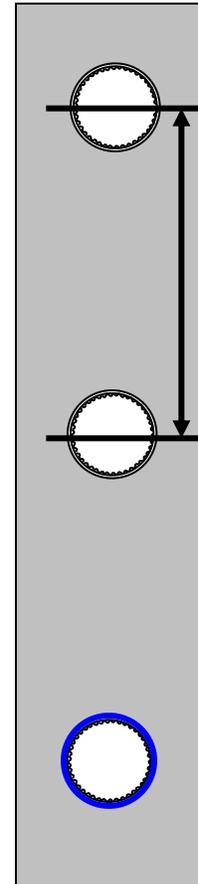
Refrigerant--> piping contact area 26%↑

Flat tube piping--> Fin contact area 17% ↑

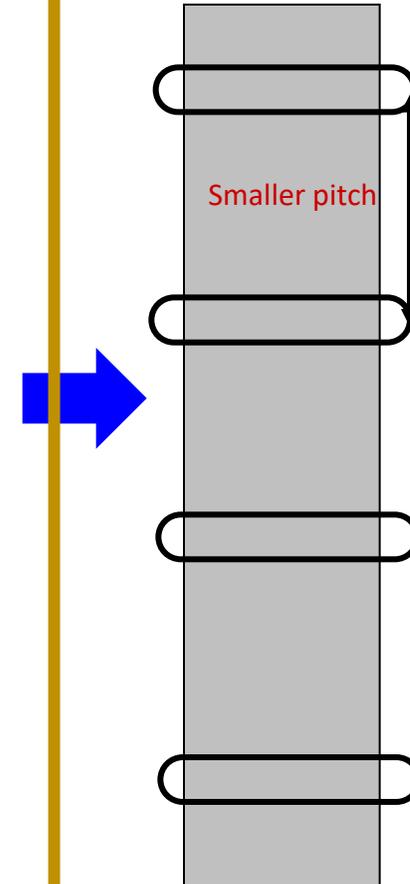
Smaller pitch increases the number of flat tube piping. (30% ↑)

Higher Heat transfer efficiency

YKD
Round tube



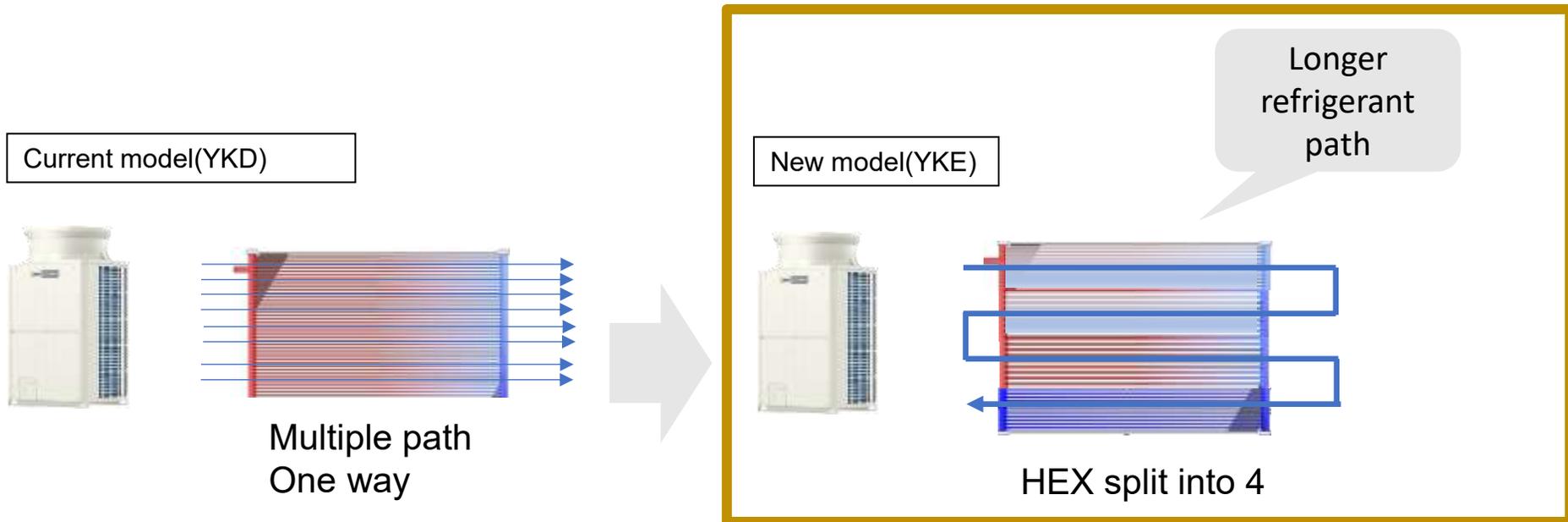
YKE
Flat tube



MFC HEX

Refrigerant flow (path)

Refrigerant flow control enable to improve the efficiency during cooling operation.



**Longer refrigerant path,
increase heat exchange efficiency**

= Leading to higher efficiency (EER, IEER)

Anti corrosion measures

Aluminum anti corrosion

Zn (Zinc) thermal spraying :
Apply Zn on the Aluminum

Flat tube

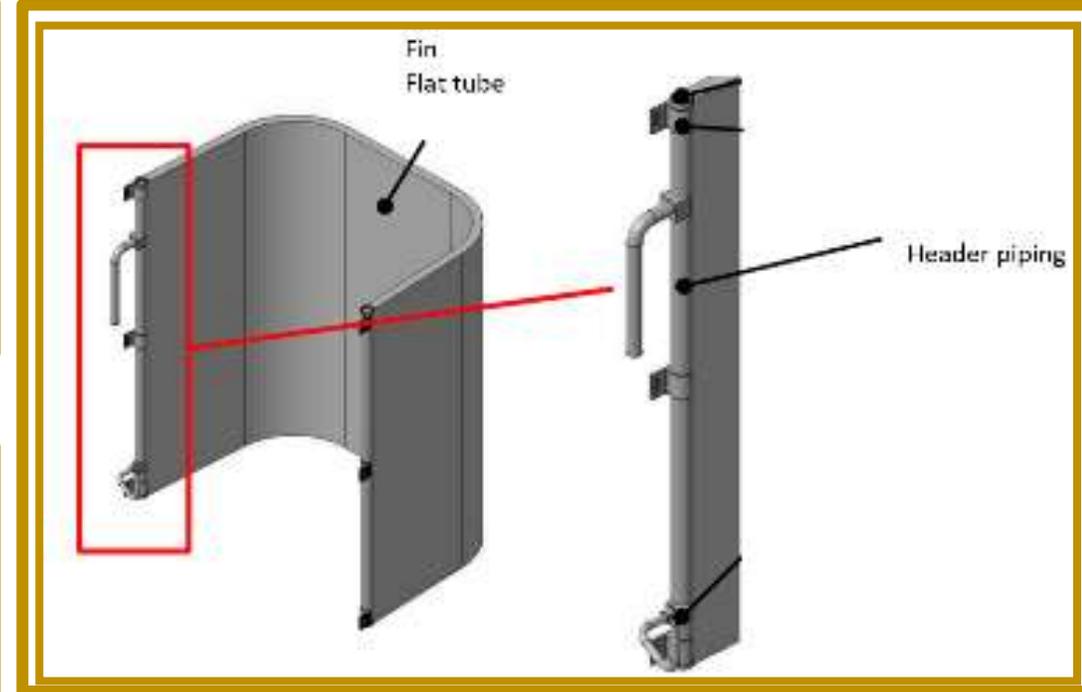


Clad material (Zn alloy)

Fin

Header piping

Zn containing aluminum fin
Sacrificial layers of clad material on both sides



New function

- IDU Capacity Priority Mode
- Low noise mode
- Gecko guard & Fan box
- Vertical Heigh Extension
- 200% Connection by Dip SW

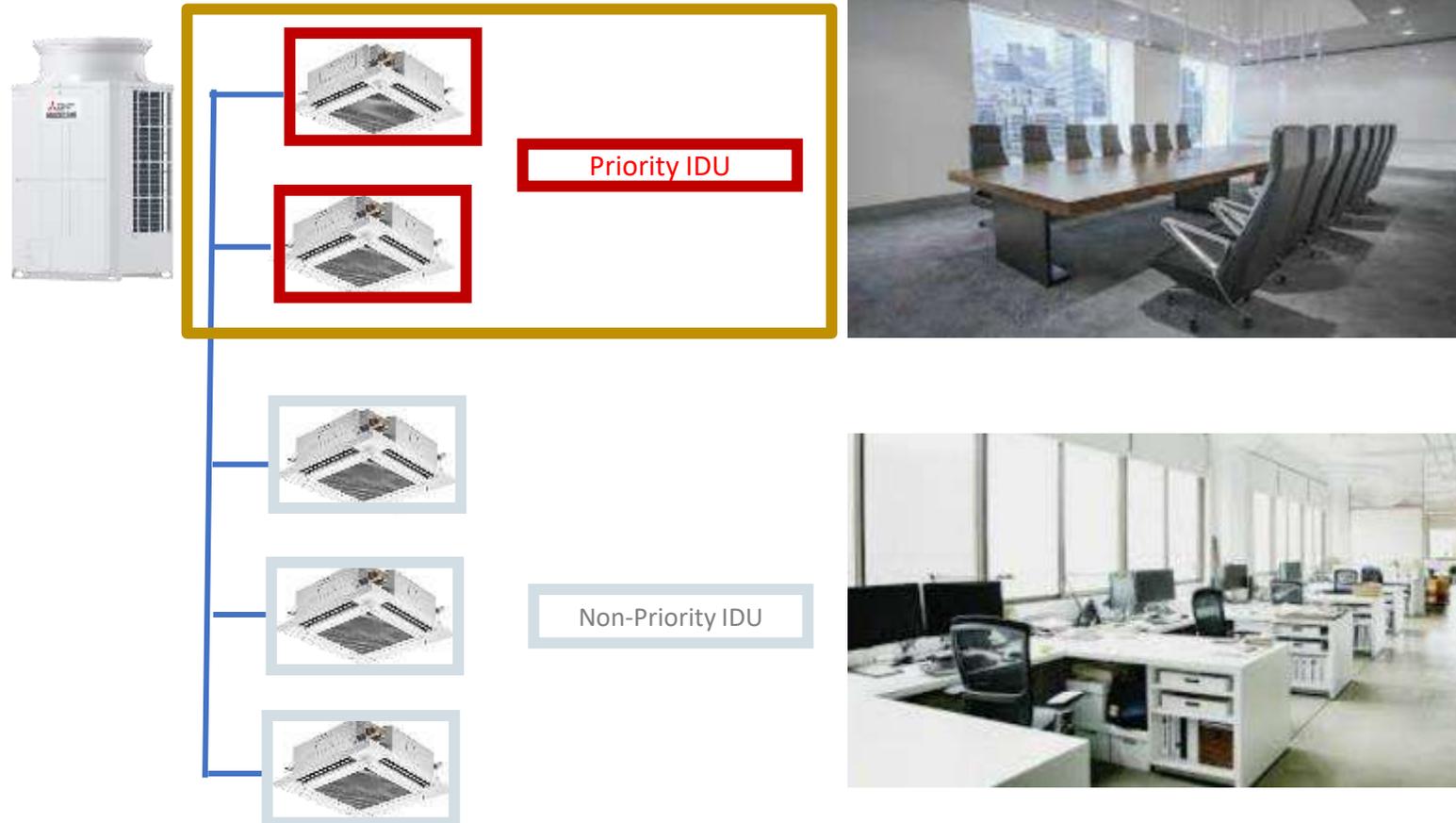
IDU Capacity Priority Mode

New Function

IDU Capacity Priority Mode

Example:

Prioritize cooling for specific indoor unit when cooling load is HIGH.



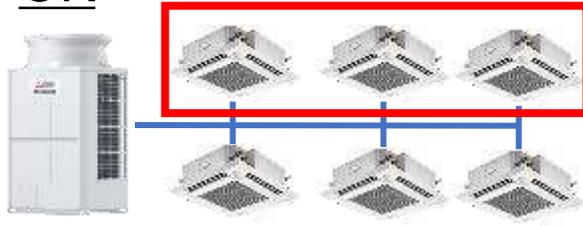
* Capacity with Non-priority cooling Indoor unit become a lower cooling capacity

New Function

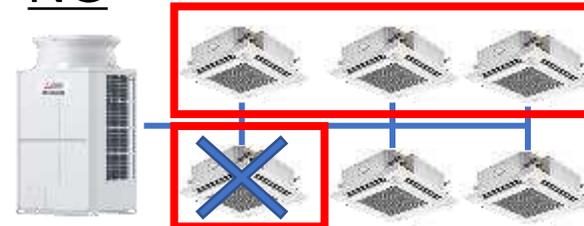
1. Number of Priority Cooling Indoor unit

Max 3 units at one refrigerant cycle system can be set as Priority IDU.

OK



NG



(STEP1) ODU Dip-SW : Set the number of Priority IDU

(STEP2) IDU address setting: Small address number will be assigned for Priority IDU.

2. Total capacity ratio (%) of Priority IDUs

Max 20% capacity out of Thermo-ON IDUs can be set as Priority IDU



with



IDU 3.6kW x 8units = 28.8kW

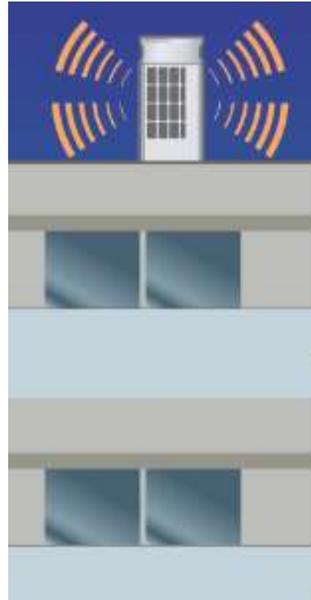
28.8kW x 20% = **5.76kW** is a maximum capacity

New Function

Low noise mode

New Function

Low noise mode (night mode)



Reduces noise level
by limiting the compressor frequency & fan rotation

YKD

Selection of 100% or 50%

* Factory exw setting 100%



YKE

4 steps (levels) available

New Function

Low noise mode (night mode) 4 steps



YKE

Fan speed setting

50% - 60% - 70% - 85% - 100%

Low noise mode setting

- Signal from AE-C400 (OR)
- DIP-SW 6-8 OFF(function low noise mode) , CN3D1-2 Close

Fan speed setting

SW4(997)	SW4(1006)	Noise mode (Fan speed)
OFF	OFF	50%
	ON	60%
ON	OFF	85%
	ON	70%

Activate condition setting

DIP SW 6-7	
ON	Low noise remain effective all time
OFF	Mode canceled when outside temp or pressure criteria are met. Unit goes into normal operation

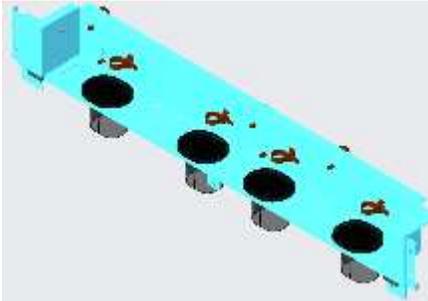
New Function

Gecko Guard & Fan box

New Function

GECKO Countermeasure

YKA



Snow guard
Under control board

YKD



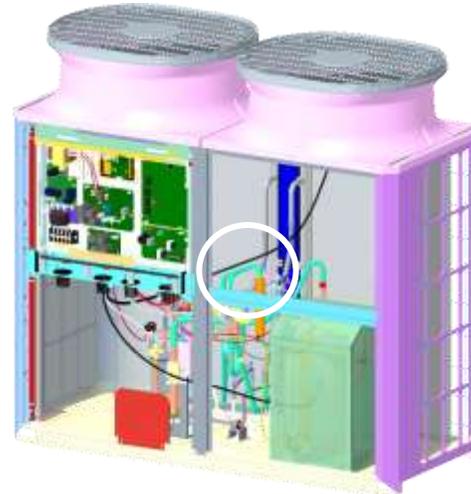
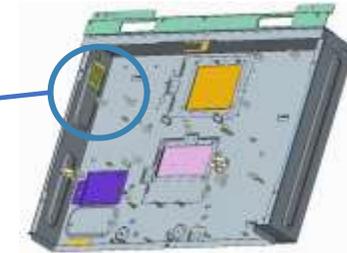
Gecko entered from the air vent slit on the control box

+

YKE



- Added punching metal parts
- Available as standard



- XL module without fan box



New Function

Vertical Heigh Extension

New Function

Vertical Height Extension

Piping Length PUCY-(E)P***YKE-A(-BS)

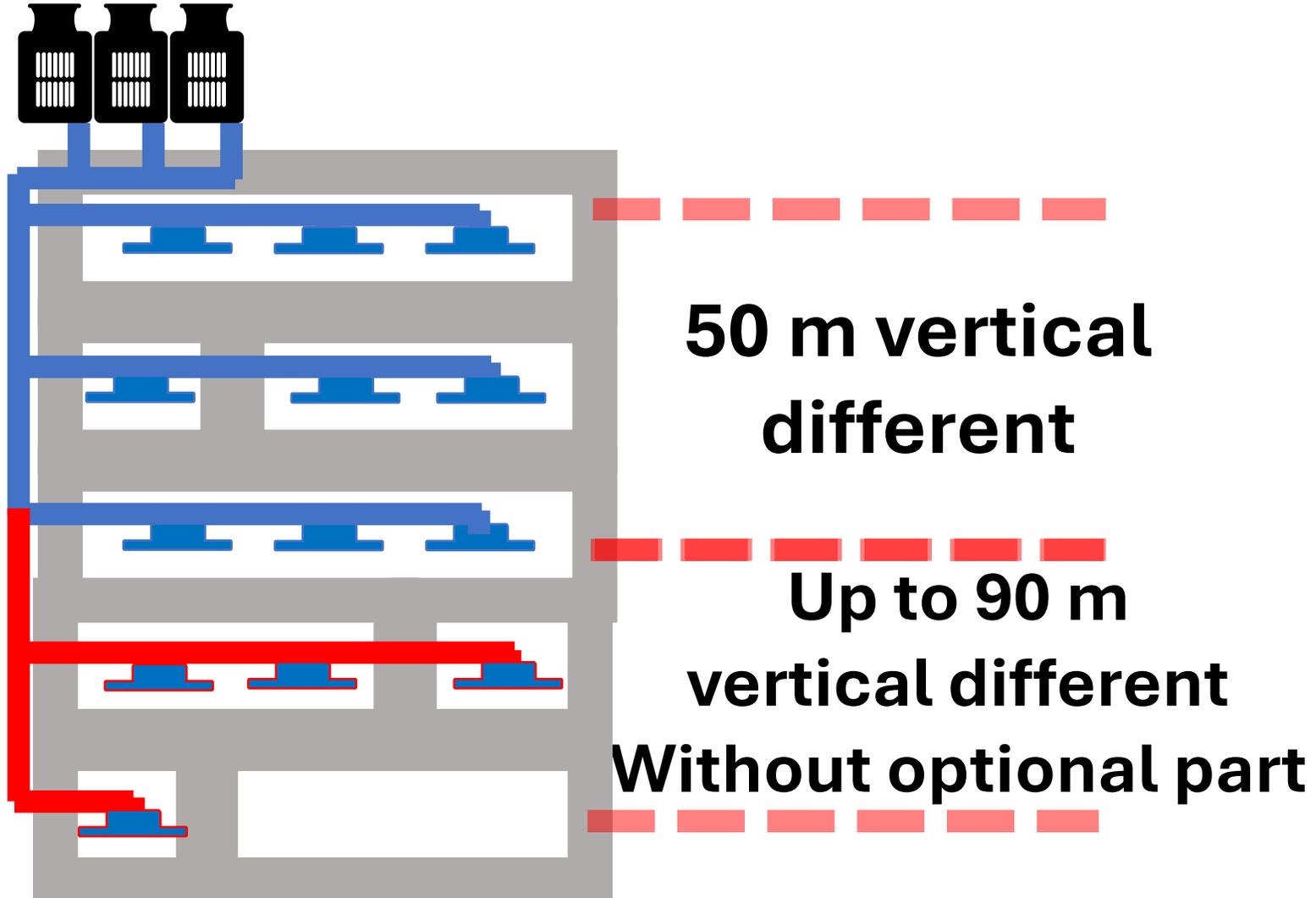
No change
from YKD

contents	YKE	
	8-54HP	56-60HP
Total piping length	1000m	800m
From OU to First branch	-	110m for 56HP 90m for 58HP 60m for 60HP
Farthest IU from OU	165m	165m
Farthest IU from first joint	40m(90m)	40m(90m)
Height between OU and IU(OU above IU)	50m(90m)※	50m(90m)※
Height between OU and IU(OU under IU)	40m	40m
Height between IU and IU	15m(30m)	15m(30m)

※ Available without middle presure sensor

New Function

Vertical Height Extension

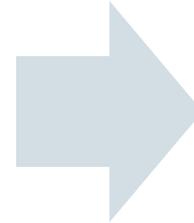
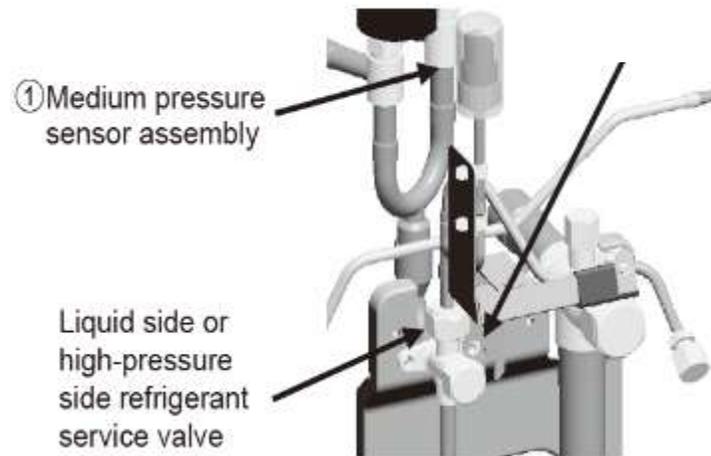


New Function

Vertical Height Extension

YKD model

Middle pressure sensor is required to install on Liquid side in order to **measure an outlet pressure value** from outdoor unit.



YKE model

Dip SW setting is required
SW 6-3 ON

YKE model **calculate the outlet pressure value by itself**



New Function

Vertical Height Extension

Vertical distance 90m is available without using an optional part.

	200	250	300	350	400	450	500	550	600	650	700	750	800	850
P-YKD	●	●	●	●	●	●	●	●	×	×	×	×	●	●
EP-YKD	—	—	—	—	●	●	●	—	—	×	●	×	×	×
P-YKE	●	●	●	●	●	●	●	●	×	×	×	×	●	●
GP-YKE	—	—	—	—	●	●	●	—	—	×	●	×	×	×
EP-YKE	●	●	●	●	●	●	●	×	●	●	●	×	×	×

	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
P-YKD	●	×	×	×	×	●	●	●	—	—	—	—	—
EP-YKD	×	×	×	●	●	—	—	—	—	—	—	—	—
P-YKE	●	×	×	×	×	●	●	●	—	—	—	—	—
GP-YKE	×	×	×	●	●	—	—	—	—	—	—	—	—
EP-YKE	×	●	●	●	●	●	●	●	●	●	●	●	●

Depends on the model

Meaning	
Possible	●
Not Possible	×

 : Combination

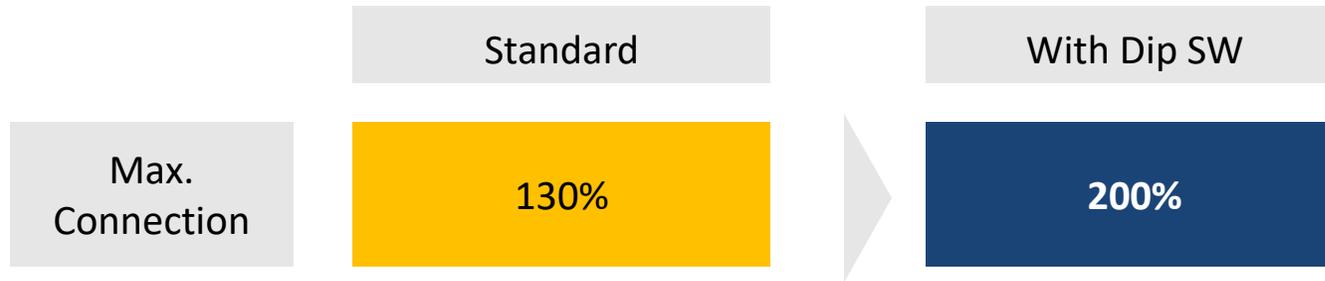
New Function

200% Connection by Dip SW

New Function

200% connection

200% connection will be available by Dip SW instead of Special ROM

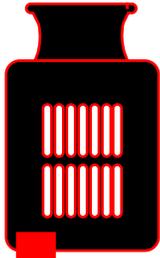


***Max connection ratio may change depending on combination**

***Max Operation capacity keeps 130% even if setting Dip SW**

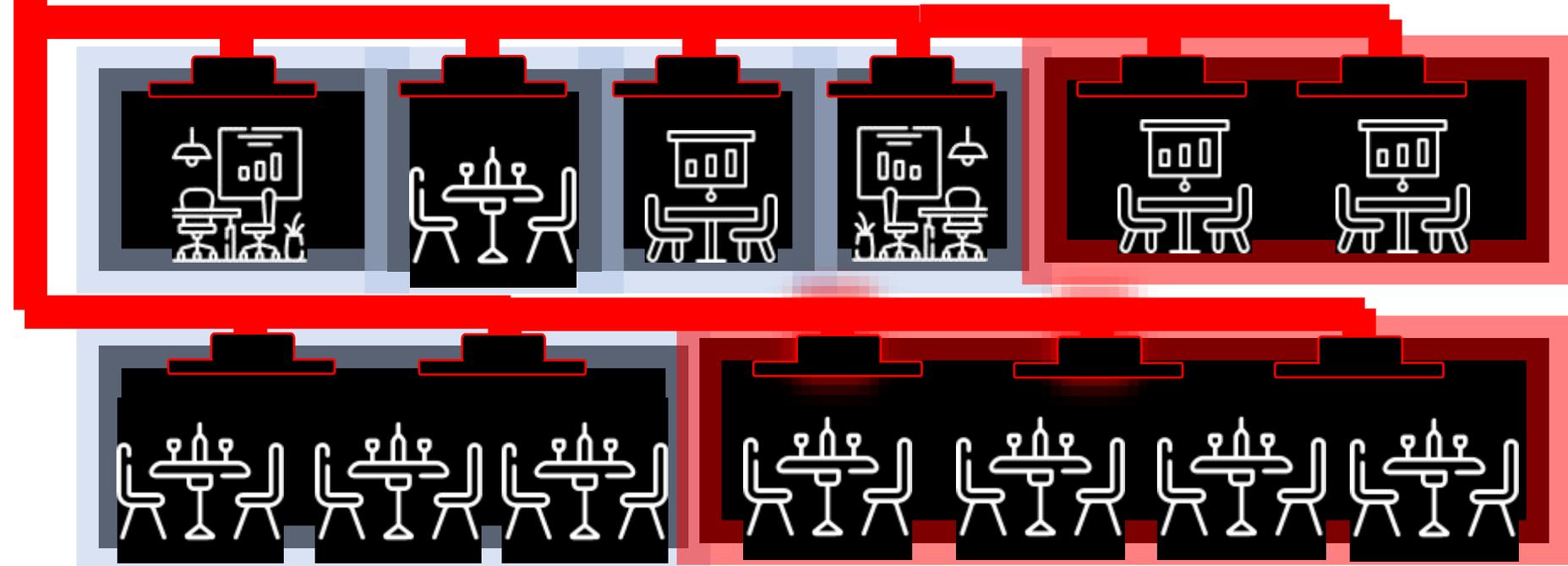
New Function

200% connection



130% Combination

Up to 200%
Combination



New Function

200% connection

Max connection

Dip SW ON

200%



130%

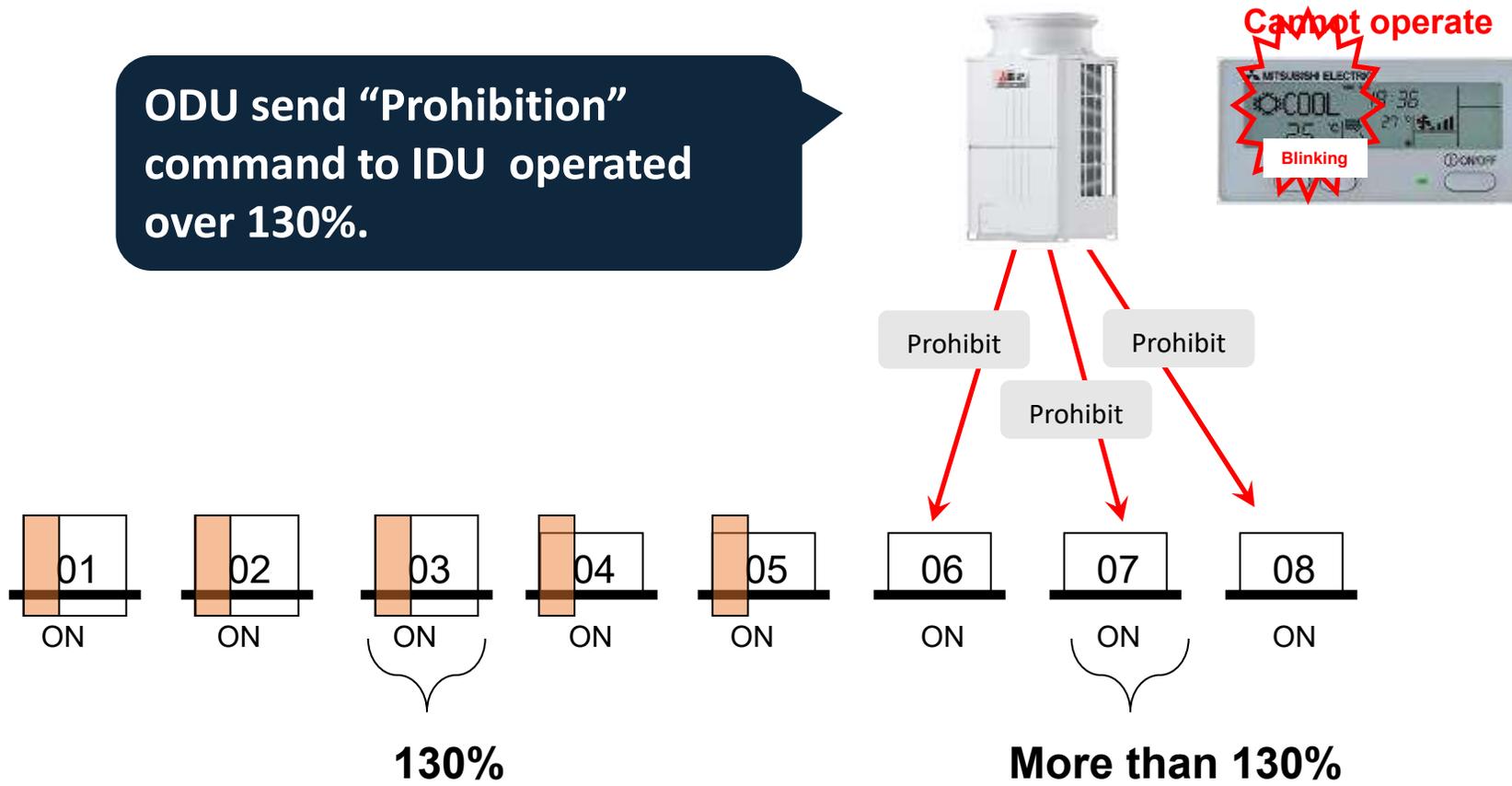
STANDARD

Max operation

New Function

What happens when IDUs operates over 130%?

ODU send "Prohibition" command to IDU operated over 130%.

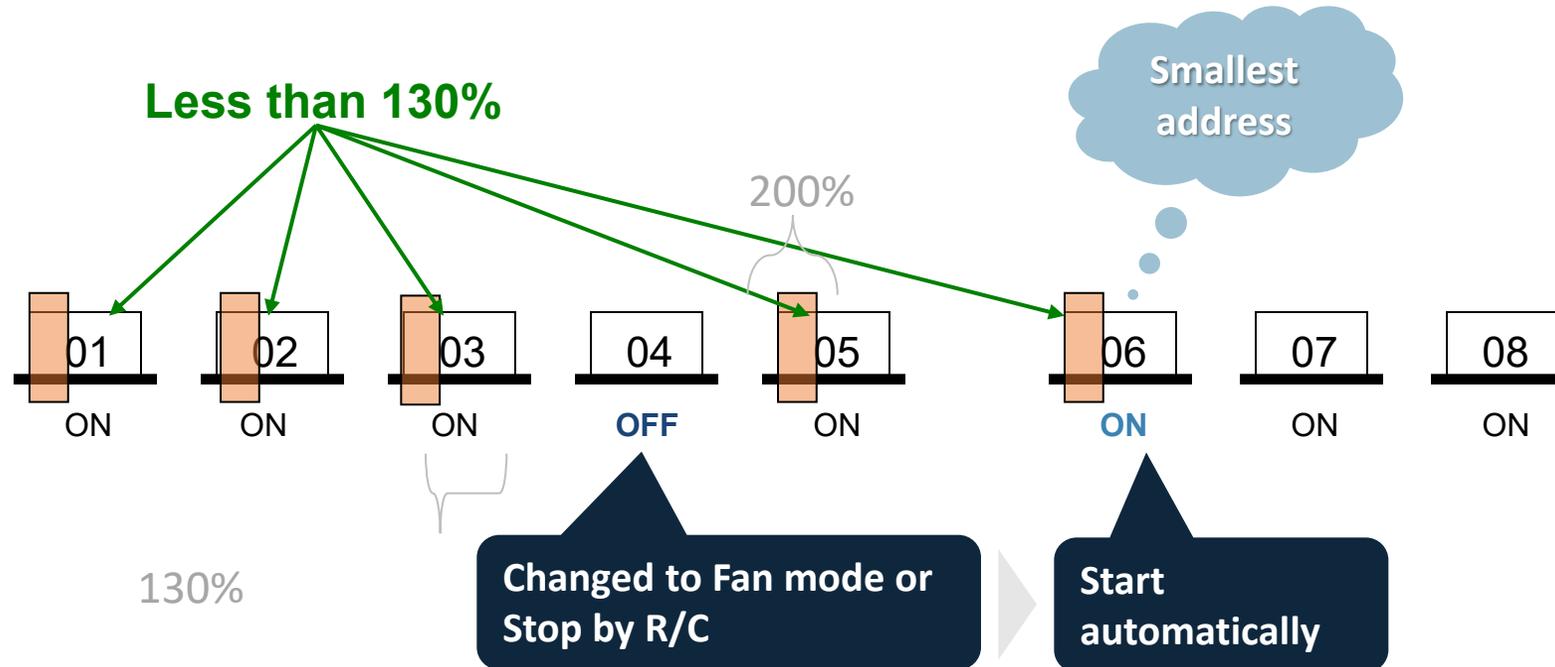


Operating units are turned on within 130% from smallest set address

New Function

Case 1

If one of IDUs is changed to Fan mode or Stop by R/C, another IDU with smallest address will start automatically.



New Function

200% connection

Availability of 200% depends on number of ODU module combination

*Max Connectable IDU capacity

	1 module	2 module	3 module
P-YKE	P200-P500	P550-P1000	P1050-P1500
SW ON	200%	160%	130%
SW OFF	130%	130%	130%

	1 module	2 module	3 module
EP-YKE	-	EP400-EP700	EP750-EP1100
SW ON	-	160%	130%
SW OFF	-	130%	130%

New Function

Pump down function

New Function

Pump Down Function

Collects the refrigerant that remains in the I/U and in the O/U's piping

Method 1) Manually close valve

Ref piping needs to be removed

Method 2) Send command and automatically close valve

when refrigerant leak is detected



Sustainability

- Less Ref. Volume
- Web IB / IM

Max refrigerant volume

Performance

■ Maximum refrigerant charge

Total amount of refrigerant charge is less than YKD model.

P-YKD Single

Total index of outdoor units			P200	P250	P300	P350	P400	P450	P500
OC1			P200	P250	P300	P350	P400	P450	P500
OC2			-	-	-	-	-	-	-
OC3			-	-	-	-	-	-	-
Maximum refrigerant charge	Factory charged	kg	5.5	6.5	6.5	11.5	11.5	11.5	11.8
	Additional charge for XL	kg	0	0	0	0	0	0	6
	Charged on site	kg	17.9	25.5	29.4	33.8	36.5	47.8	56.3
	Total for system(b)	kg	23.4	32	35.9	45.3	48	59.3	68.1

P-YKE Single

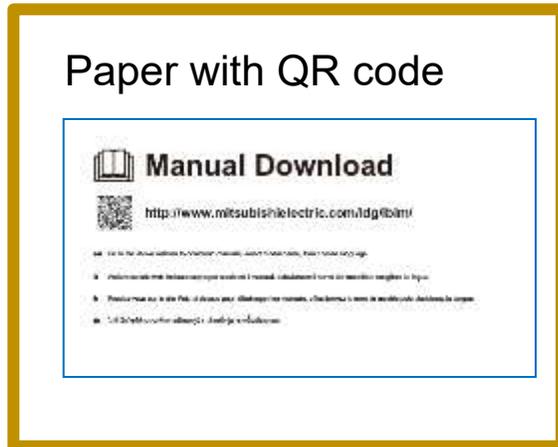
Total index of outdoor units (P-YKE)			P200	P250	P300	P350	P400	P450	P500	
OC1			P200	P250	P300	P350	P400	P450	P500	
OC2			-	-	-	-	-	-	-	
OC3			-	-	-	-	-	-	-	
Maximum refrigerant charge	Factory charged	Kg	3	3	3	5	5	5	6	
	Additional charge for XL	Kg	0	0	0	0	0	0	0	
	Charged on site	Kg	17.9	25.5	29.4	33.8	36.5	47.8	50.3	
	Total for system(a)	Kg	20.9	28.5	32.4	38.8	41.5	52.8	56.3	
vs YKD			%	89.3%	89.1%	90.3%	85.7%	86.5%	89.0%	82.7%

Achieve with MFC (Reduced HEX row, flat tube)

Web IB / IM

Web IB/IM

Only paper with QR code is enclosed with YKE model so that you can access following site. Please kindly download IM/IB through the site.



<https://www2.mitsubishielectric.com/#>

Search

Step.0 Please select Region

Step.1 Please input Model

Step.2 Please select language

Region: Europe

Model: PEFY4100VMA-E3

Language: English

Results

Model				Download
PEFY-P20VMA-E3				
PEFY-P25VMA-E3				
PEFY-P32VMA-E3				
PEFY-P40VMA-E3				
PEFY-P50VMA-E3				
PEFY-P100VMA-E3				
PEFY-P125VMA-E3				
PEFY-P140VMA-E3				
PEFY-P20VMA-E3	Instruction Manual	3.56 MB	31Mar'19	KJ78K0241-01_001.pdf
PEFY-P25VMA-E3				
PEFY-P32VMA-E3				
PEFY-P40VMA-E3				
PEFY-P50VMA-E3				
PEFY-P100VMA-E3				
PEFY-P125VMA-E3				
PEFY-P140VMA-E3				
PEFY-P20VMA-E3				
PEFY-P25VMA-E3				
PEFY-P32VMA-E3				
PEFY-P40VMA-E3				
PEFY-P50VMA-E3				
PEFY-P100VMA-E3				
PEFY-P125VMA-E3				
PEFY-P140VMA-E3	Instruction Page	4.4 MB	31Mar'19	KJ78K0241-01_001.pdf
PEFY-P20VMA-E3				
PEFY-P25VMA-E3				
PEFY-P32VMA-E3				
PEFY-P40VMA-E3				
PEFY-P50VMA-E3				
PEFY-P100VMA-E3				
PEFY-P125VMA-E3				
PEFY-P140VMA-E3				

Step0 Region
Step1 Model name
Step2 Language

download

Other changes

- Sound level
- Cooling capacity

Sound Level

Other changes

SPECIFICATIONS OF OUTDOOR UNIT OF CITY MULTI R410A SERIES				
MODEL		PUCY-P200YKE (-BS)		QUANTITY
Model		PUCY-P200YKE (-BS)		
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1	kW	22.4	
		BTU/h	76,400	
	Power input	kW	4.48	
	Current input	A	7.5-7.1-6.9	
Temp. range of cooling	Indoor	W.B.	15.0~24.0 °C (59~75 °F)	
		D.B.	10.0~52.0 °C (50~126 °F)	
	Outdoor			
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	
	Quantity		1~17	
Sound power level (measured in anechoic room)		dB (A)	77.5	

77.5 dB (A)

Sound Power Level

		8HP	10HP	12HP	14HP	16HP	18HP	20HP
ME	P-YKD(dB)	-	-	-	-	-	-	-
	EP-YKD(dB)	-	-	-	-	-	-	-
	P-YKE(dB)	77.5	78.5	78.5	81.5	83.5	83.5	82.5
	EP-YKE(dB)	77.5	78.5	80.5	80	80	80.5	82.5
D	VRV A(dB)	78	81	85	84	86	83	85

Comparison with Competitor

		8HP	10HP	12HP	14HP	16HP	18HP	20HP	Win	Lose	Tie
	P-YKE vs VRV A(dB)	-0.5	-2.5	-6.5	-2.5	-2.5	+0.5	-2.5	6	1	0
	P-YKE vs P-YKD(dB)	-	-	-	-	-	-	-	-	-	-

		8HP	10HP	12HP	14HP	16HP	18HP	20HP	Win	Lose	Tie
	EP-YKE vs VRV A(dB)	-0.5	-2.5	-4.5	-4	-6	-2.5	-2.5	7	0	0
	EP-YKE vs P-YKD(dB)	-	-	-	-	-	-	-	-	-	-

Other changes

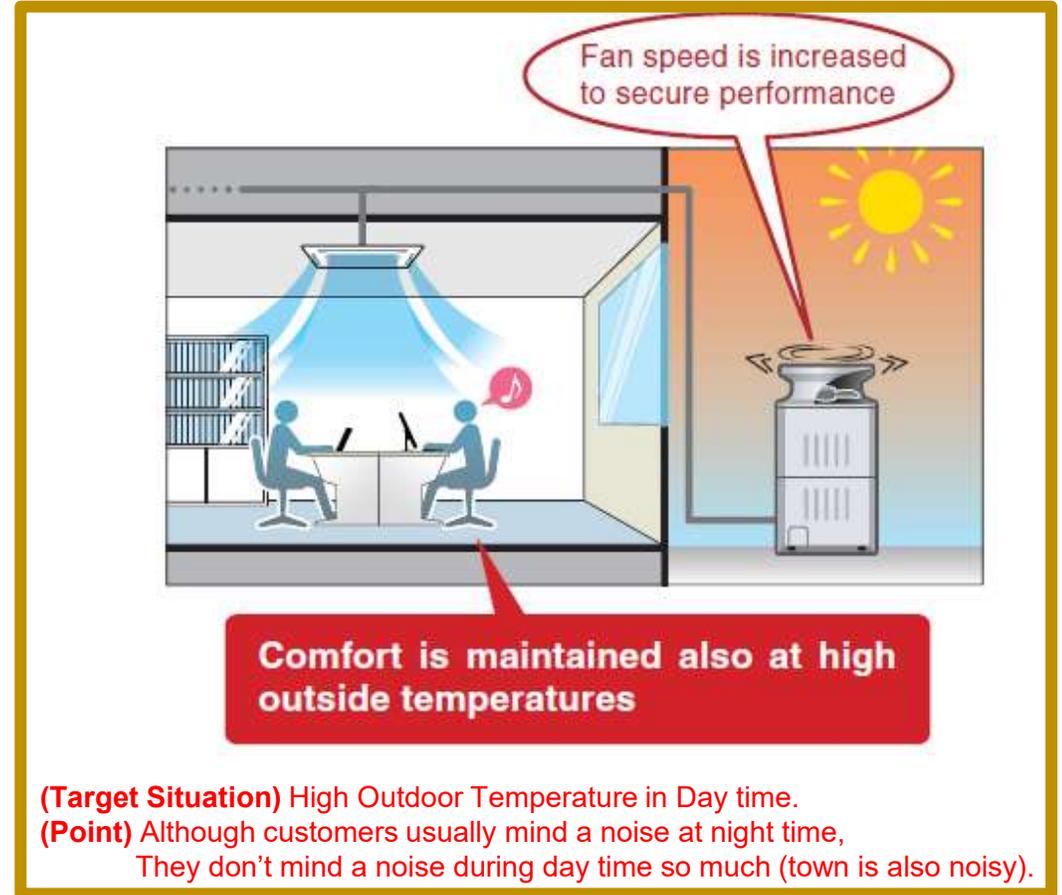
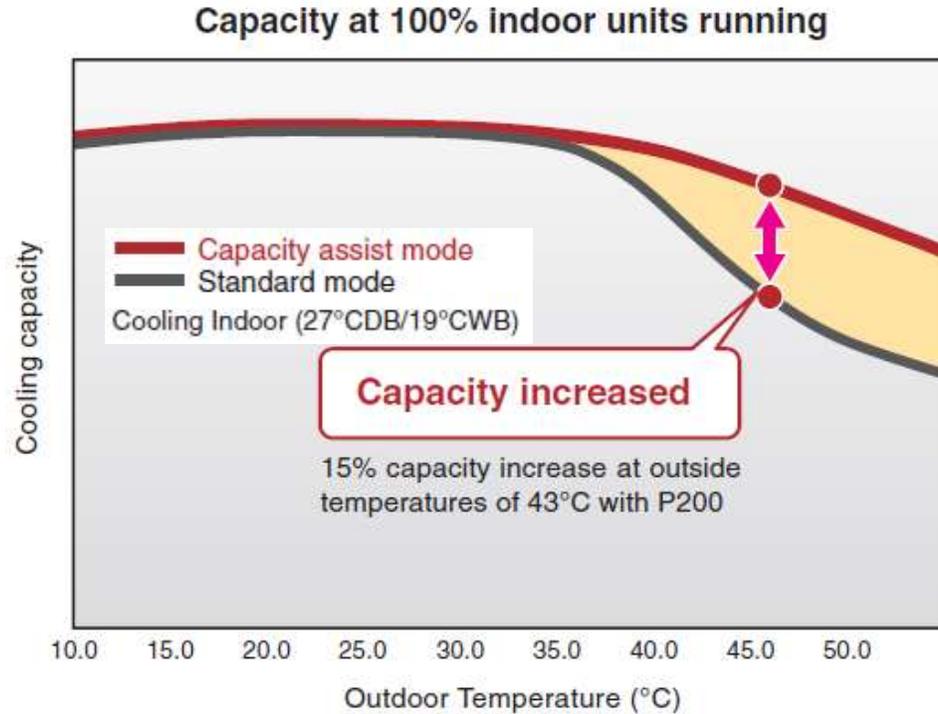
Cooling capacity

At high ambient temperature

Function for Asia !

CONFIDENTIAL

(1) Capacity Assist Mode



**** YKE**

<Capacity Drop Ratio> * Requires a DIP switch setting

HP	8	10	12	14	16	18	20
Normal	84%	71%	67%	68%	68%	62%	65%
Assist Mode	90%	84%	80%	74%	-	-	78%

(Condition)

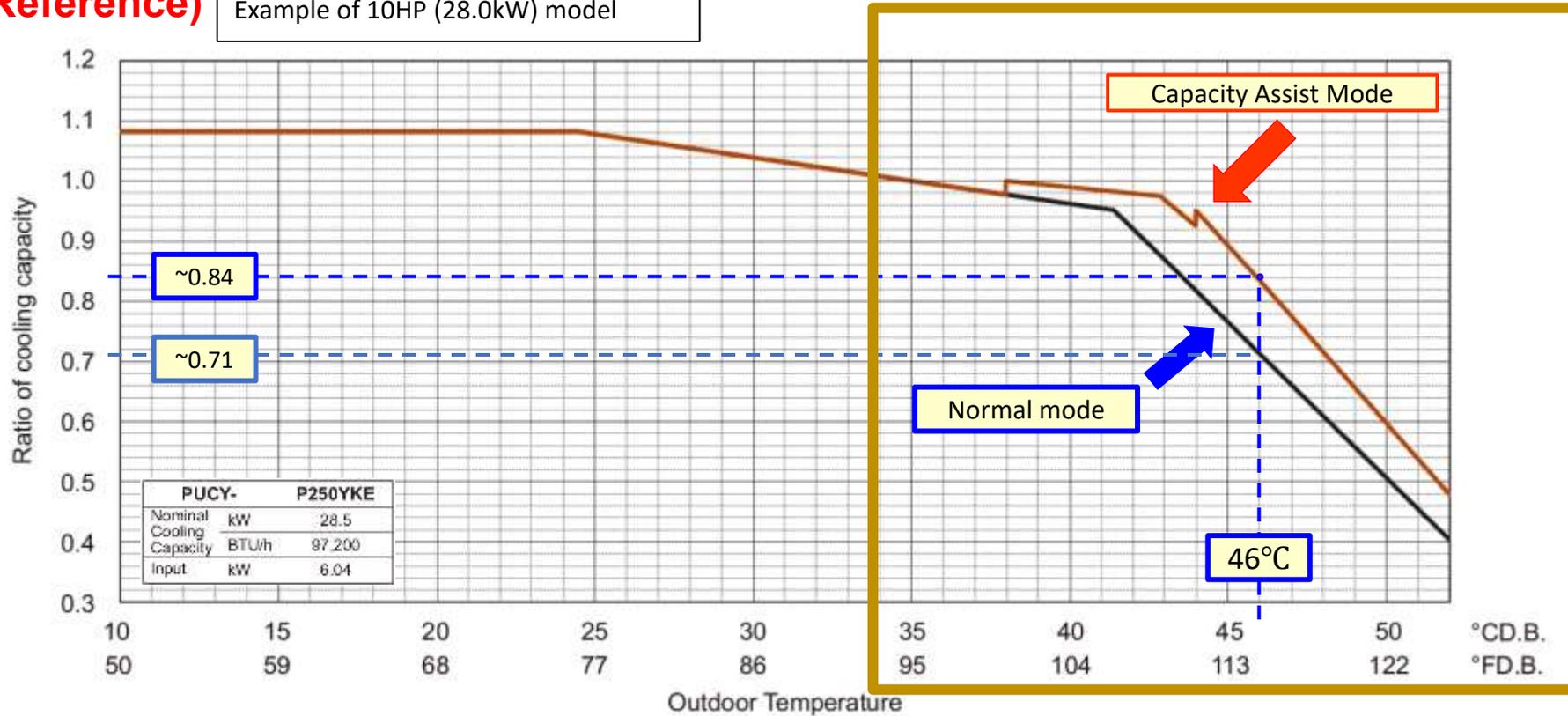
Outdoor : 46°CDB
Indoor : 19°CWB

This mode prevents a drop in cooling capacity during operation at high outside temp. Comfort is improved, thanks to continued high performance of the unit.

Function for Asia !

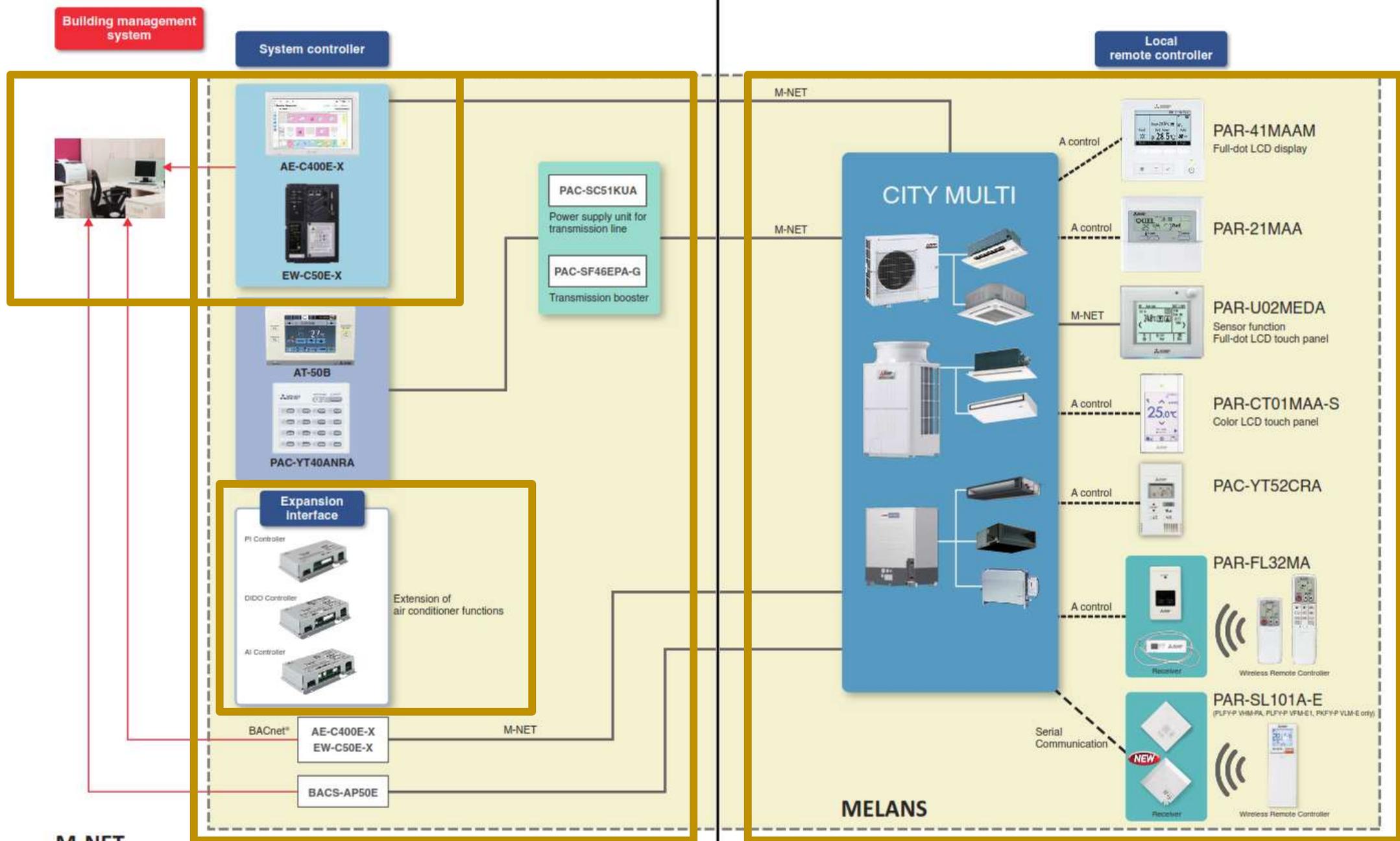
CONFIDENTIAL

(Reference) Example of 10HP (28.0kW) model



- 1) Under higher ambient temperature, fan table will be changed (Standard → Capacity assist mode).
Try to reduce capacity drop by increasing fan rotation (Reduce high pressure side).
- 2) Starting conditions (① and ② and ③)
 - ① Ambient temp sensor TH7 ≥ 38°C
 - ② Not under “Night mode”
 - ③ Dip-SW4
- 3) Note
 - ① Fan noise will be increased *1-2dB
 - ② Power input will be increased

Controller introduction



M-NET

Using our MELANS products enhances air-conditioning EFFICIENCY and QUALITY, contributing to ENERGY SAVINGS and reducing running cost. We offer a wide variety of MELANS products to meet requirements - from the smallest and simplest, to the largest and most complex. We have individual remote controllers, various centralized controllers, BMS interface, etc.

AE-C400E-X / EW-C50E-X Introduction

Line-Up

Previous

AE-200E

- *Max 200 indoor units connectable
- *10.4inch PET(Polyester) Sheet LCD
- *Monitor and operation via Web Browser
- *PIN code license for extended functions



AE-50E

- *Max 50 indoor units connectable
- *10.4inch PET(Polyester) Sheet LCD
- *Monitor and operation via Web Browser
- *PIN code license for extended functions



EW-50E

- *Max 50 indoor units connectable
- *Monitor and operation via Web Browser
- *PIN code license for extended functions



Now

AE-C400E-X

- *Max **400** indoor units(Include LOSSNAY) connectable
- ***12.1**inch Full Flat Glass LCD
- *Upgraded User Interface (Integrated U/I between unit and Web Browser)
- ***Pre-installed PIN code license function**



EW-C50E-X

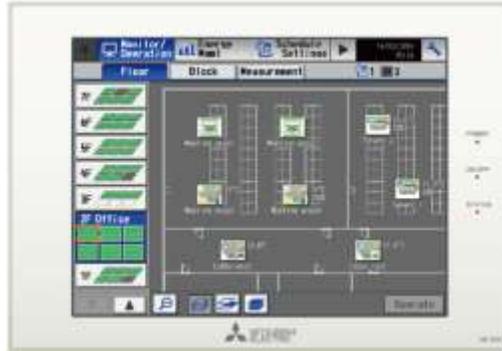
- *Max 50 indoor units connectable
- *Upgraded User Interface (Web Browser)
- *Pre-installed PIN code license function



AE-C400E-X / EW-C50E-X

LCD screen

New Features



10.4inch PET(Polyester) Sheet LCD

Resistive Touch Panel
Detects touch through pressure

USB Type A



12.1inch Full Flat Glass

Capacitive Touch Panel

for highly precise and quick response

USB Type C

AE-C400E-X / EW-C50E-X

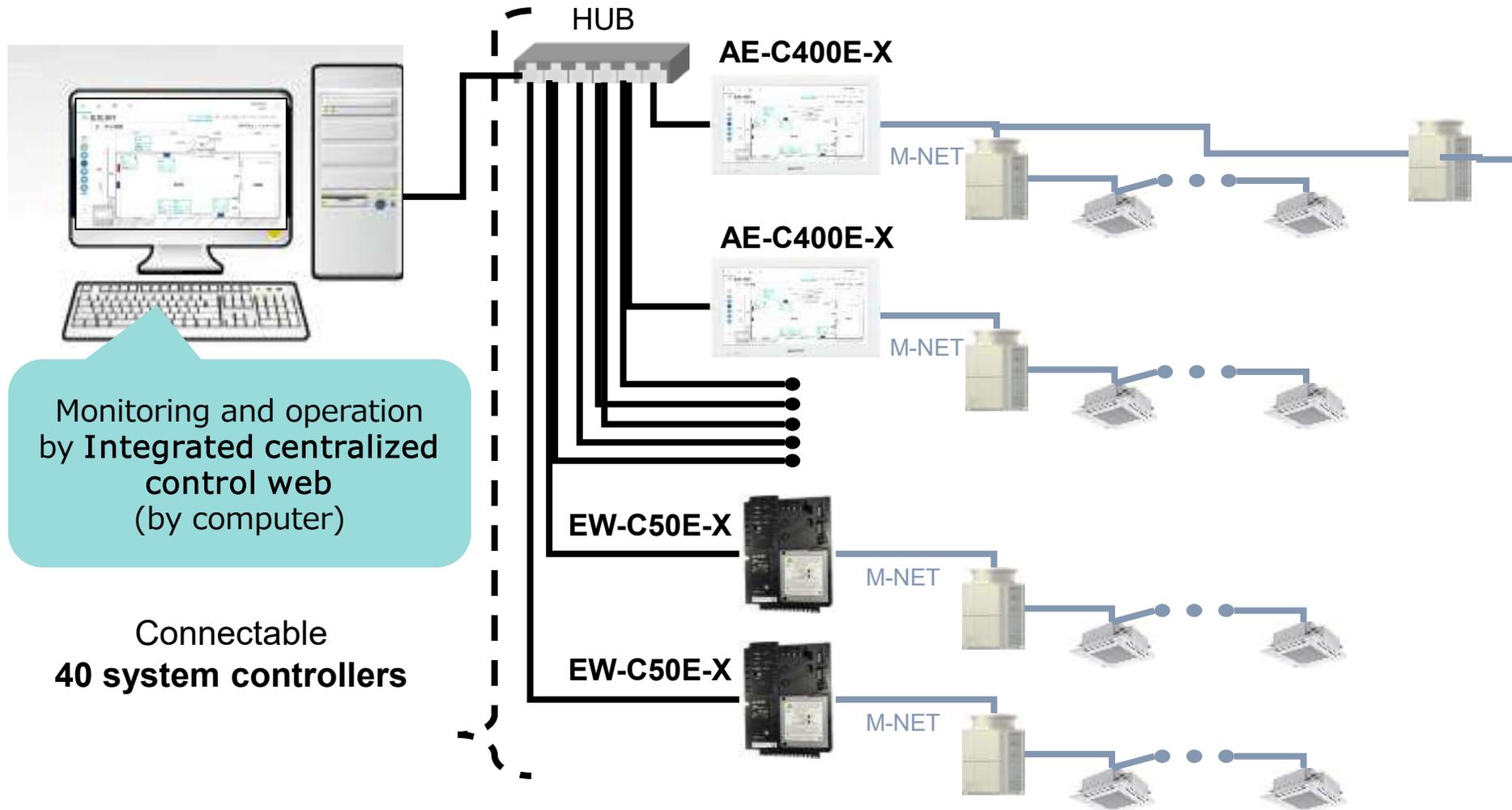
New Features

Number of connectable units

		
Maximum number of units <u>per AE</u>	50 units	50 units
Maximum system controller connected	4 controllers	8 controllers
Maximum number of units <u>per system</u>	200 units	400 units

Integrated centralized control web

System configuration for **over 401** indoor unit (e.g.)



AE-C400E-X / EW-C50E-X

New Features

Centralized Control - AE-C400E-X



Owners
Developers

Assist quick response to error

Error notification e-mail and error log / icons on the display enables quick action in case of trouble.

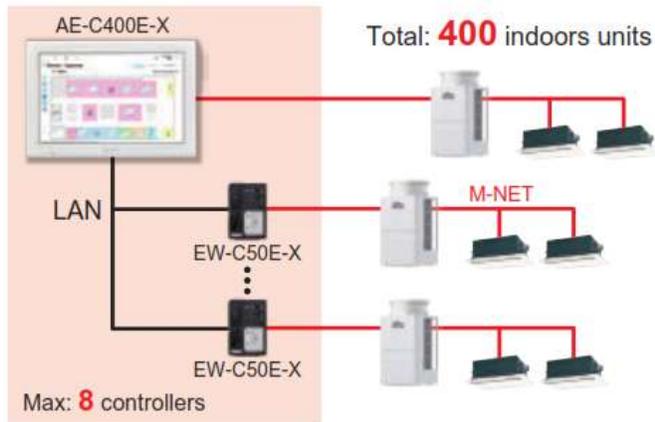
Time saving billing method

AE-C400E-X apportions the value on the WHM of the outdoor unit based on the operating time of each indoor unit.

Advanced energy saving with peakcut operation

Energy saving with outdoor unit capacity control depending on demand level or the electric energy values.

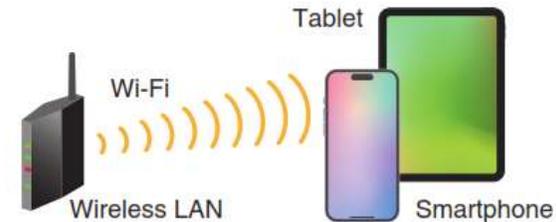
On-site or Remote control



Testing & commissioning

24/7 Monitoring & Troubleshooting

Remote management



The monitoring and control information can also be viewed remotely from a LAN-connected PC, tablet, or smartphones.

BACnet[®]

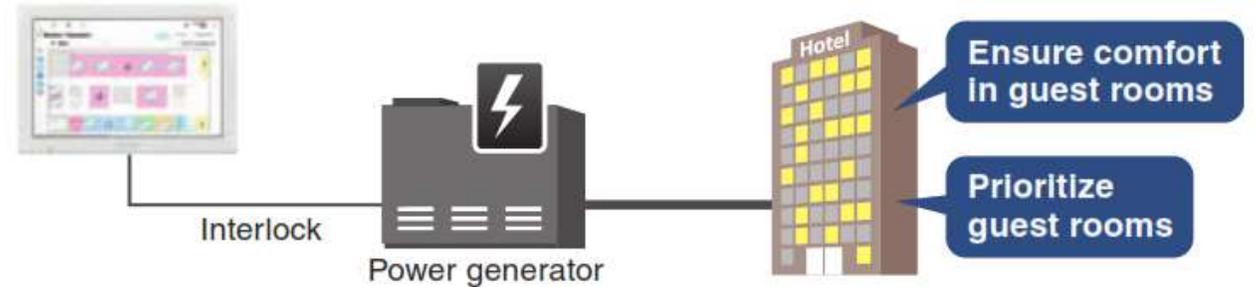
The system can be combined into the large-scaled BMS management via BACnet.

AE-C400E-X / EW-C50E-X

New Features

Interlock functions to ensure comfort

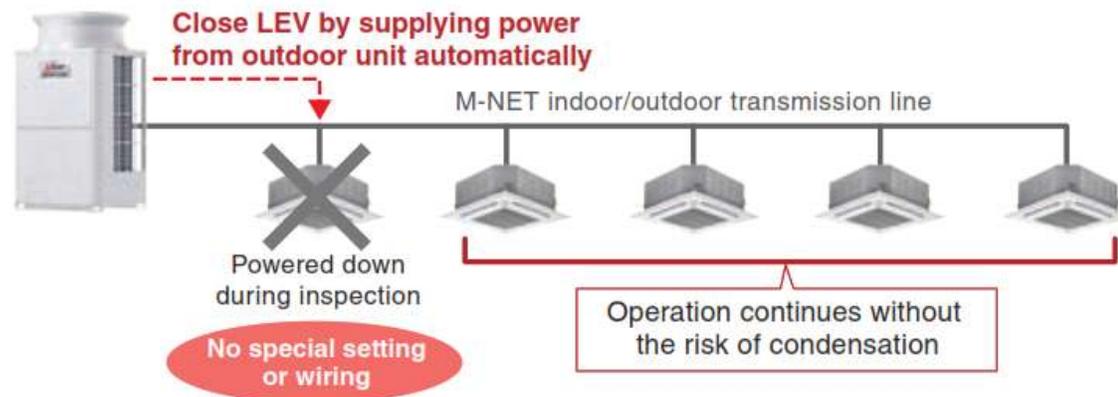
By interlocking an in-house power generator and AE-C400E-X, in the case of a power shutdown, it is possible to reduce operating capacity in common areas such as the lobby or staff room.



Owners
Tenants

High reliable system

Measures in case of malfunction or maintenance leads to higher reliability.



Mitsubishi Electric's original M-NET system enables indoor units to continue operation even when one unit in the system stops due to malfunction or maintenance.

AE-C400E-X / EW-C50E-X

New Features

Connectable Modbus WHM

- Following WHMs are connectable with AE-C400E-X/EW-C50E-X
- The line-up will be listed in Instruction Book

Manufacture	Model
Carlo Gavazzi Energy Analyzer	Energy Analyzer EM210/EM340 Series
ABB	B23
MitsubishiElectric	ME96SS*-MB series
MitsubishiElectric	EMU4-FD1-MB
Hager	ECx380D
Schneider	iEM3150
Schneider	PM8000/PM8240





Thank you