

System Comparison

Multi V III vs. Single Split system





1. Stylish Design (Interior Exterior)

2. Long Piping Length

High rise building application

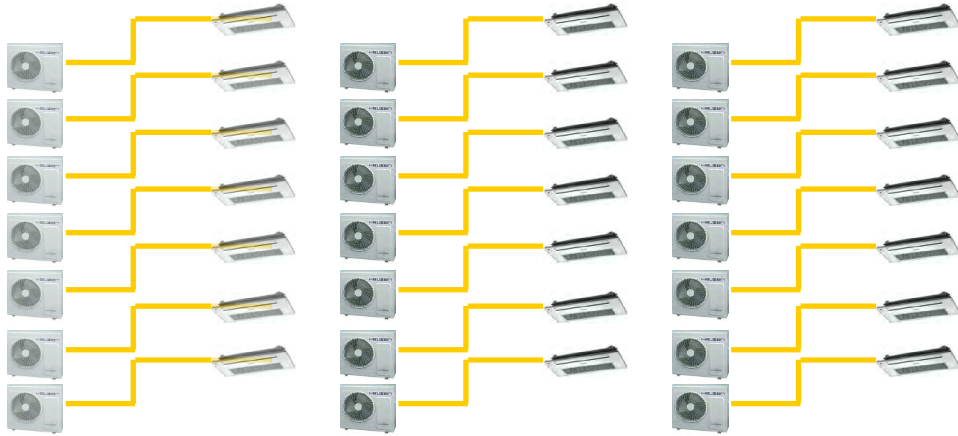
3. Various way of installation

space & electric equipment saving

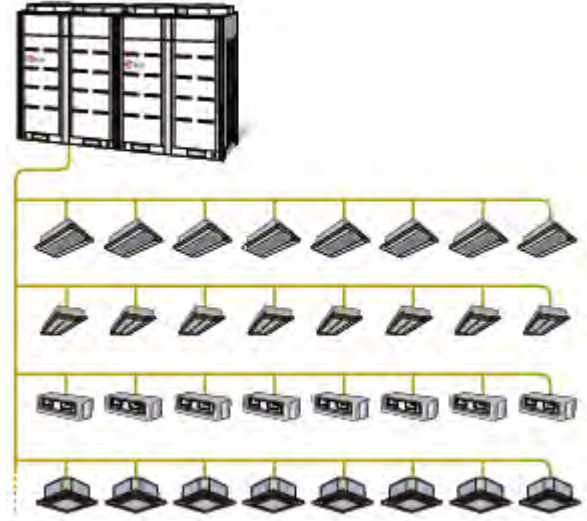
4. Energy Saving

5. Eco-Friendly

Normal Split type



Multi V III



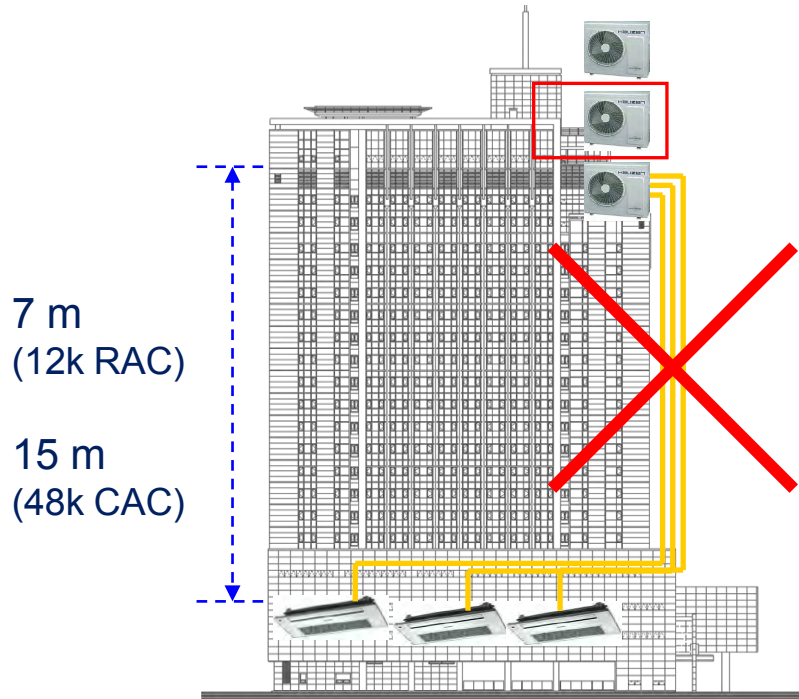
High rise Building Application

Internal Use Only

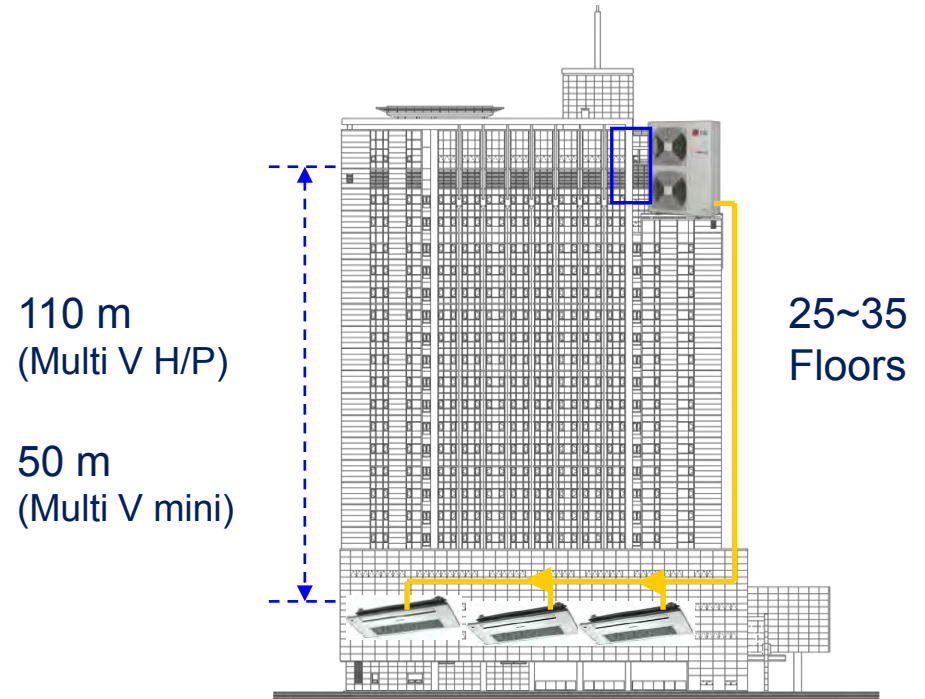


High rise building application is allowable to Multi V III due to oil circulation & Sub-cool Technology

Normal Split type



Multi V III



Save Outdoor installation Area

Normal Split type

Split 9kBtu 7 units (6HP)



0.23 m²

0.23 m²

0.23 m²

0.23 m²

0.23 m²

0.23 m²

0.23 m²

Total 1.58 m²
(100%)

Multi V III

Multi V mini 6HP



0.31 m²
(20%)

Simplify Electric Power supply

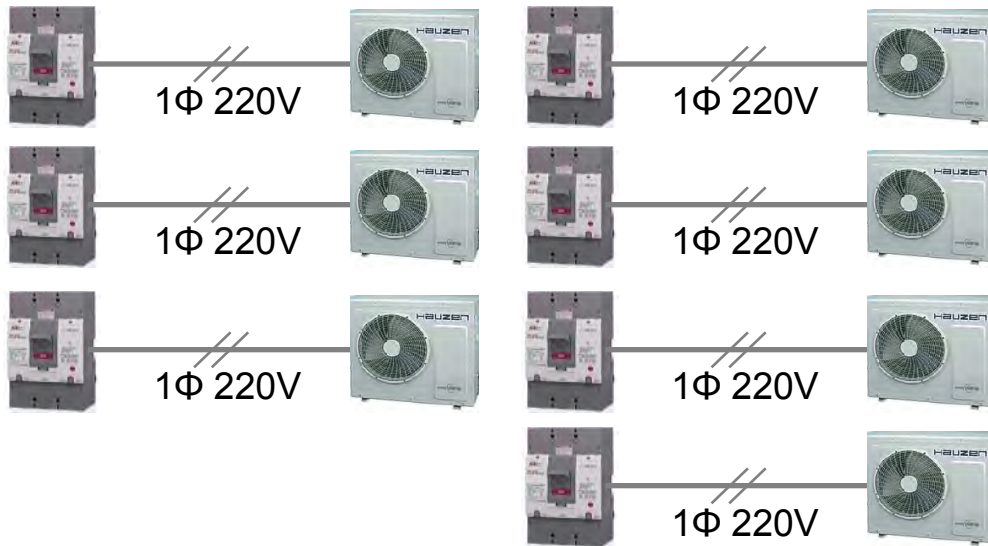
LG Internal Use Only



Save Electric equipment & space

Normal Split type

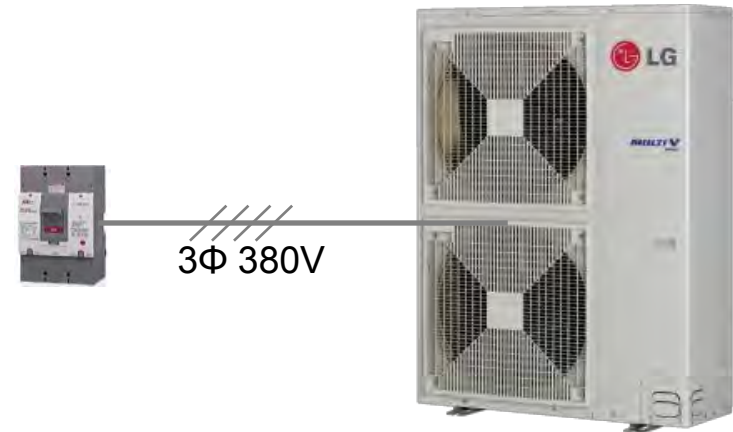
Split 9kBtu 7 units (6HP)



Circuit Breaker : 7ea (10A)
Electric wire : 7ea (1.2 cm²)

Multi V III

Multi V mini 6HP



Circuit Breaker : 1ea (20A)
Electric wire : 1ea (1.5 cm²)

Applicable various type of controller

Individual controller



PC central controller



Simple central controller



Advanced central controller



Smart interlocking control !!



Control of key switch

Motion sensing

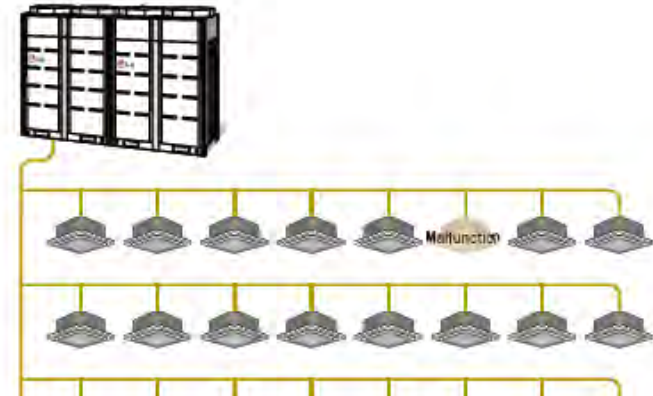
Automatic Compressor Backup operation

When a compressor malfunctions, the other compressor that is operating normally in an outdoor unit can run automatically as a substitute, minimizing any inconvenience that may occur in an emergency situation.



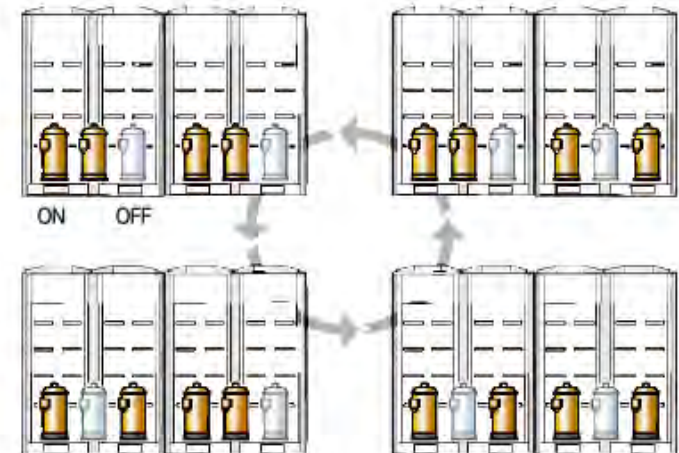
If some indoor unit has problem?

Even though an indoor unit malfunctions, the other indoor units operate normally because each indoor unit is operated individually by the Micom embedded in it.



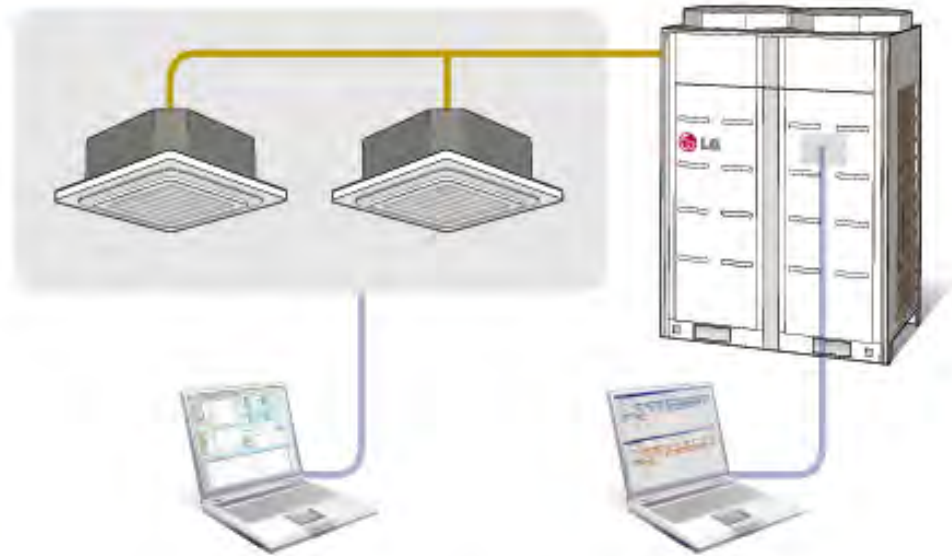
Automatic Alternative operation

When a combination of outdoor units is installed, their compressors run sequentially and individually, providing the compressors with extended life, improved performance, and reliability.



Powerful LGMV Program

This program allows you to monitor and control the operation status of the product. Since the program can be connected to either an outdoor unit or indoor unit, you can check the operation status of the product easily and conveniently any time and anywhere.

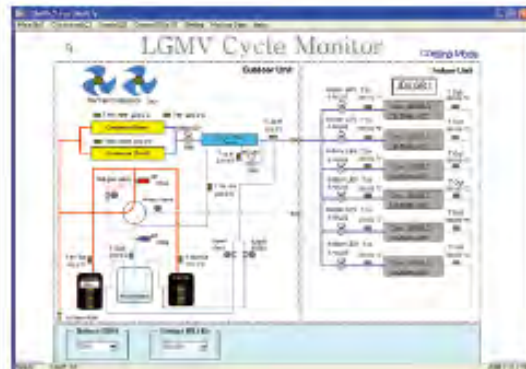


EASY Fault Diagnosis
ALL Information for the system
are on your Laptop

LG MV Cycle View



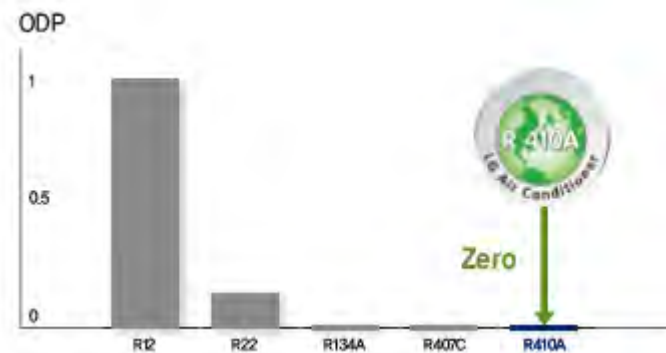
Cycle



Indoor unit control



Using LG Inverter AC is same as planting 138 big cone pines



0.5



R 22

R410A

Zero Ozone Depletion Potential (ODP)



Using LG Inverter AC



138

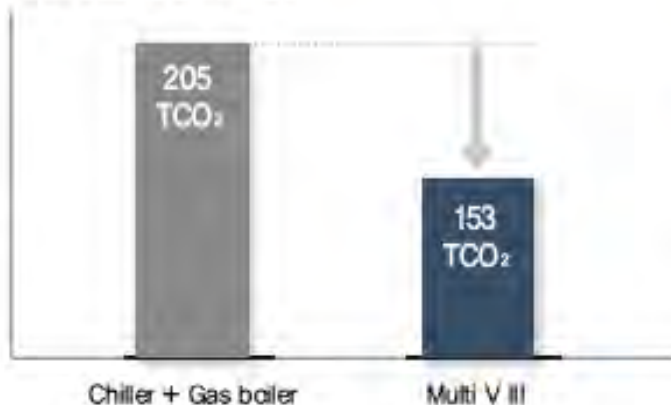
138 big cone pines

- 1) KFRI (Korea Forest Research Institute) calculated based on annual power save.
(Assumption : Using AC 4hr/day, 365days)
- 2) Energy saving 37% was compared with LG Noninverter model

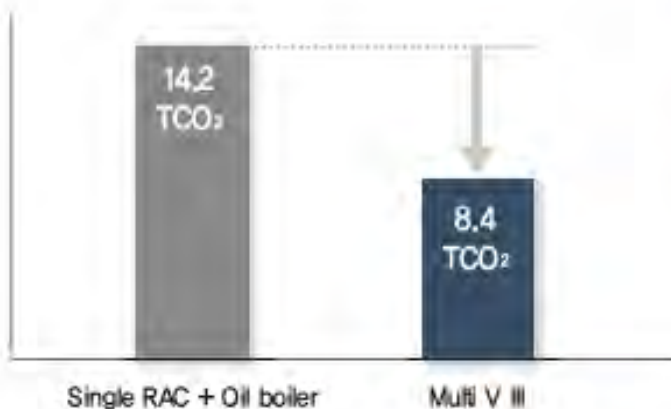
Carbon dioxide reduction

Due to high energy efficiency of the heat pump inverter system, the product emits less CO₂ than any other systems, contributing to the prevention of global warming caused by CO₂.

TCO₂ Based on Korea



Operating a 400 HP capacity for 10 hours a day, with 4 months of cooling and 4 months of heating, will reduce CO₂ emissions by the same amount that 24 cars emit over a year.

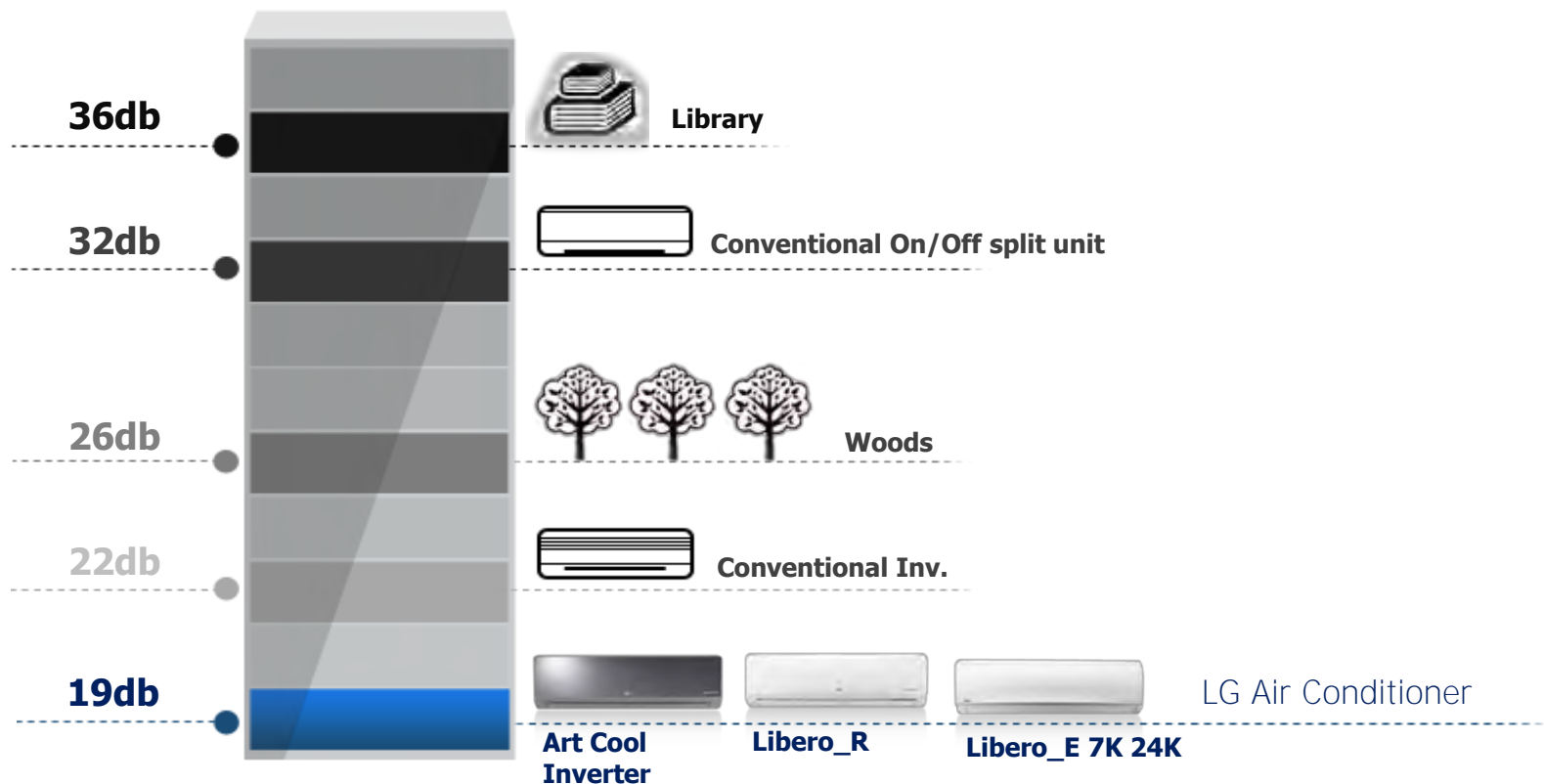


Operating a 14 HP product at the rated power level for 8 hours a day, with 4 months of cooling and 4 months of heating



※Basis for calculation: 2000cc gasoline, 10 km/liter, 10,000 km/year

The Inverter technology, the BLDC Motor technology, and LG's unique new Skew Fan technology have achieved the world's lowest noise level of 19dB. Thus, the Sleep mode will allow pleasant sleeping.



Payback year 3 ~ 5 year from installation due to running cost saving

Example

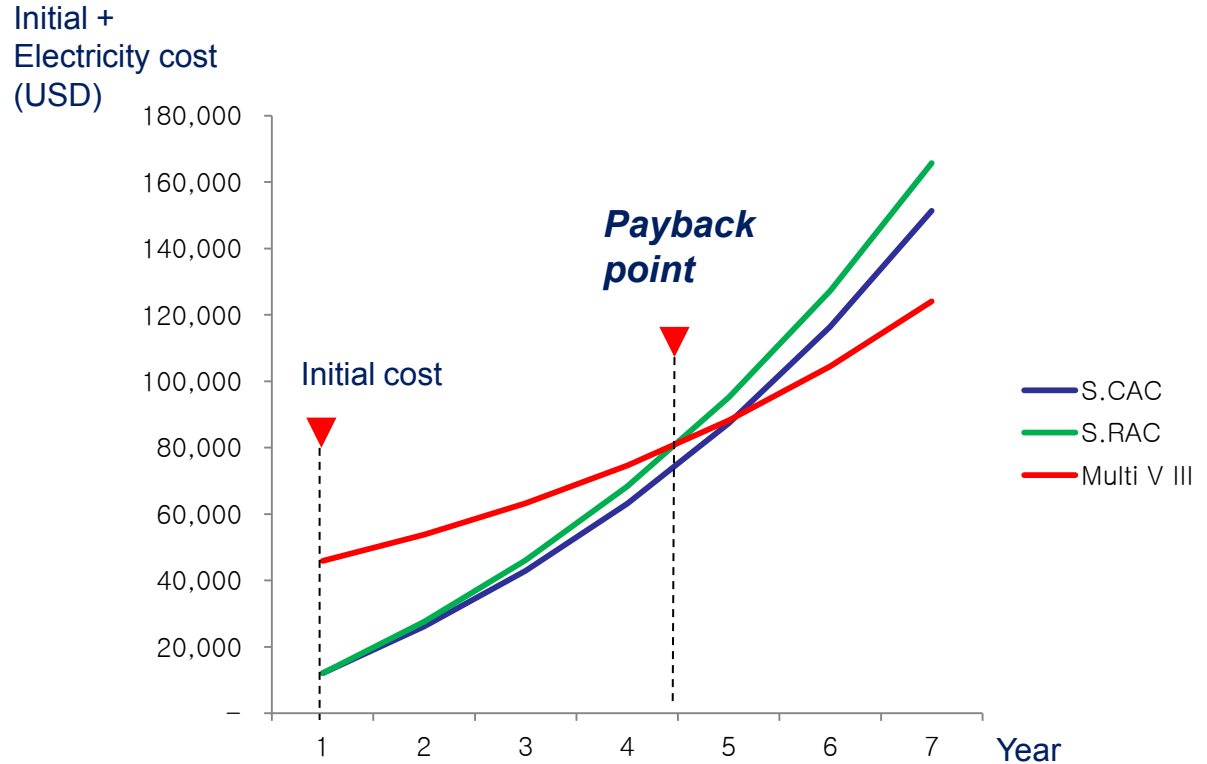
(general condition)

1. Small office : 1000 m²
2. Total capacity of equipment : 150kW
3. Equipment
 single split RAC : 43ea of 12kbtu
 single split CAC (Ceiling duct) :21ea of 24Kbtu
 Multi V III : 3ea 18HP → 54HP

(operational condition)

1. Annual escalation of electricity fee : 20%
2. Energy charge (USD/kWh) : 0.2

Partial Load Calculation (AHRI standard)



App. Cost Analysis (Excel detail)

Internal Use Only



General Condition

Common general Data		
No. of hours operation per day		10
No. of days operation per month		22
Energy Charge(USD/kWh)		0.2
Max Cooling Capacity(kW)		150
annual escalation of electricity fee(%)		20%
demand load per m ² (kW/m ²)		0.15
Total area (m ²)		1000
season diversity	summer	100%
	spring/ autumn	50%
	winter	10%

Cost analysis

Model	Model	ESEER COP	Power input	initial cost (USD)			Energy charge(USD)						
				unit price	installation	Total	year1	year2	year3	year4	year5	year6	year7
single CAC		3.20	70,125.00	9,643	2,411	12,054	14,025	16,830	20,196	24,235	29,082	34,899	41,878
single RAC		2.90	77,379.31	9,643	2,411	12,054	15,476	18,571	22,285	26,742	32,091	38,509	46,211
Mult V III plus		5.70	39,368.42	32,143	13,776	45,918	7,874	9,448	11,338	13,606	16,327	19,592	23,511

Accumulated Cost

year	0	1	2	3	4	5	6
S.CAC	12,054	26,079	42,909	63,105	87,340	116,422	151,321
S.RAC	12,054	27,529	46,100	68,386	95,128	127,219	165,728
Multi V III	45,918	53,792	63,240	74,579	88,184	104,511	124,103