

Cut down on electricity bills with an energy-saving model.

*Actual energy usage and savings are subject to operating conditions and electricity tariff. Price of electricity presented is in US\$ with reference to Singapore Power
<https://www.spgroup.com.sg/home>



WHITE
PAPER

Enjoy reduced power consumption just by changing over to one of our latest models featuring these functions:



Eco operation and Energy saving

Unlike conventional ultra low freezers, TwinGuard ULT freezers use natural hydrocarbon (HC) refrigerants to provide minimal energy consumption, reduced environmental impact and substantially lower running costs. These refrigerants also have an extremely low Global Warming Potential, helping organizations to meet environmental objectives.



New inverter compressor

Energy Efficient, Balanced Power Smart compressors, natural refrigerants and integrated electronics combine to lower your facility's operating costs. Freezer operation is managed by the practical balance of temperature performance and energy management.



Ultimate Sample Protection

Unlike conventional ultra low freezers, TwinGuard ULT freezers have two independent refrigeration systems to provide the highest levels of sample security. Should one system unexpectedly fail, the other will maintain a temperature in the -70°C range ensuring that the integrity of irreplaceable and potentially life-saving samples are not put at risk.

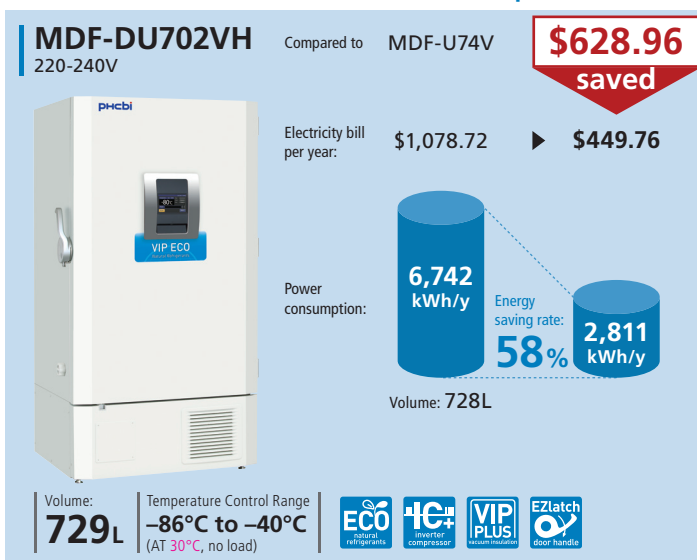
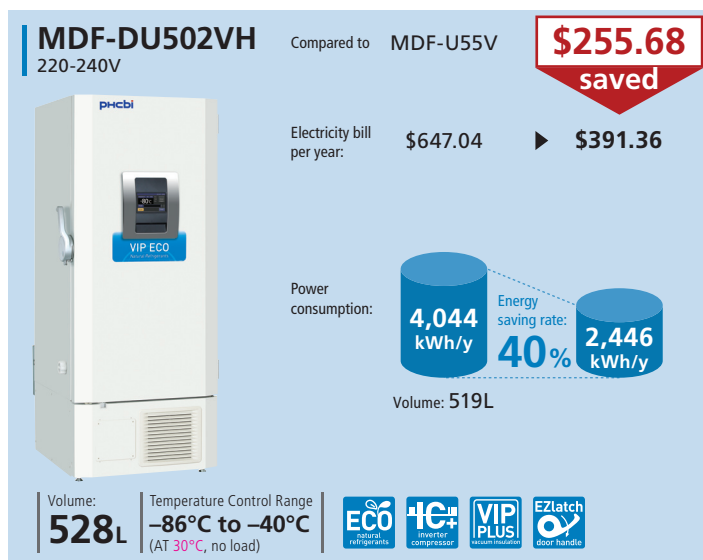


Innovative VIP* Technology

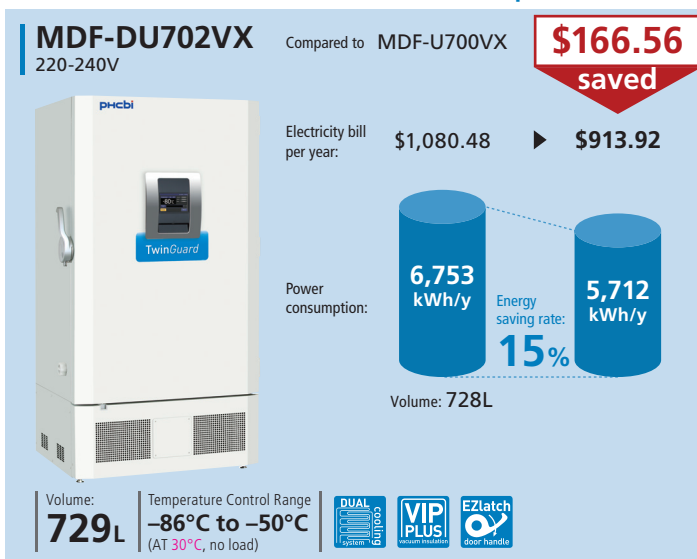
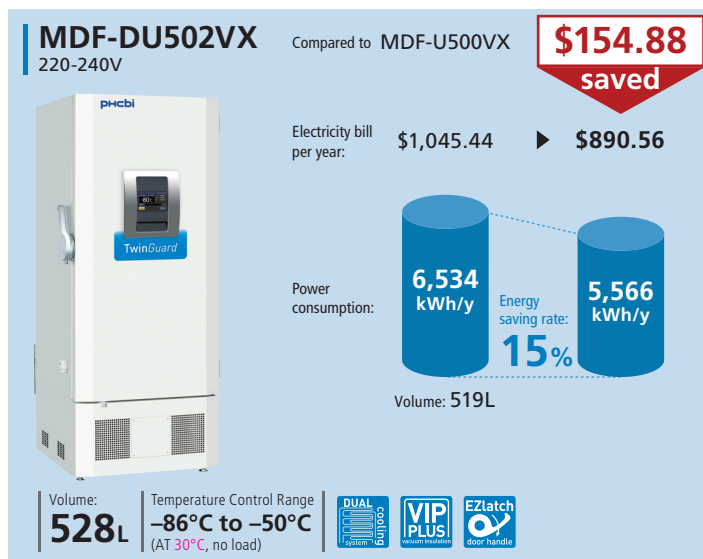
VIP is the innovative insulation technology developed by PHC containing densely packed, open cell foam insulation under the vacuum panel. This configuration dramatically enhances the insulation capability of the freezer and achieves nearly 30% more storage capacity increase. The VIP Plus achieved 6 times stronger thermal resistance with more rigid foam polyurethane while keeping the same thickness of 70mm.

*Vacuum Insulation Panel

-86°C to -40°C Ultra-low temperature freezers



-86°C to -50°C Ultra-low temperature freezers




Cut down on electricity bills with an energy-saving model.

-86°C to -50°C
Ultra-low temperature freezer

MDF-DU901VHL
220-240V

Compared to MDF-DU900V

\$419.84
saved







Electricity bill per year: **\$922.08** ▶ **\$502.24**

Power consumption: **5,763 kWh/y** Energy saving rate: **46%** **3,139 kWh/y**

Volume: **845L**

Volume: **845L**

Temperature Control Range: **-86°C to -50°C**
(AT 30°C, no load)






-30°C to -20°C | -40°C to -20°C
Biomedical freezers

MDF-MU539HL
115V / 220-240V

Compared to MDF-U5312

\$88.16
saved





Electricity bill per year: **\$218.40** ▶ **\$130.24**

Power consumption: **1,365 kWh/y** Energy saving rate: **40%** **814 kWh/y**

Volume: **482L**

Volume: **504L**

Temperature Control Range: **-30°C to -20°C**
(AT 5°C to 35°C, no load)



MDF-MU539

Compared to MDF-MU539

\$44.96
saved

Electricity bill per year: **\$175.20** ▶ **\$130.24**


Power consumption: **1,095 kWh/y** Energy saving rate: **26%** **814 kWh/y**

Volume: **504L**

MDF-MU339HL
115V / 220-240V

Compared to MDF-MU339

\$39.04
saved





Electricity bill per year: **\$131.36** ▶ **\$92.32**

Power consumption: **821 kWh/y** Energy saving rate: **30%** **577 kWh/y**

Volume: **369L**

Volume: **369L**


Temperature Control Range: **-30°C to -20°C**
(AT 5°C to 35°C, no load)



MDF-MU549DH(L)
220-240V

Compared to MDF-U5412

\$65.92
saved





Electricity bill per year: **\$263.36** ▶ **\$197.44**

Power consumption: **1,646 kWh/y** Energy saving rate: **25%** **1,234 kWh/y**

Volume: **482L**

Volume: **479L**

Temperature Control Range: **-40°C to -20°C**
(AT 5°C to 35°C, no load)



Cut down on electricity bills with an energy-saving model.

2°C to 14°C
Pharmaceutical refrigerators

MPR-S150H
220-240V

Compared to MPR-S163

\$99.20 saved

Electricity bill per year: \$163.52 ▶ \$64.32

Power consumption: 1,022 kWh/y
Energy saving rate: 61%
402 kWh/y

Volume: 158L

Temperature Control Range: 2°C to 14°C
(AT -5°C to 35°C, no load)

ECO natural refrigerants
iG+ inverter compressor



MPR-S300H
115V / 220-240V

Compared to MPR-S313

\$140.16 saved


Electricity bill per year: \$221.92 ▶ \$81.76

Power consumption: 1,387 kWh/y
Energy saving rate: 63%
511 kWh/y

Volume: 340L

Temperature Control Range: 2°C to 14°C
(AT -5°C to 35°C, no load)

ECO natural refrigerants
iG+ inverter compressor



Refrigerator: 2°C to 14°C | Freezer: -30°C to -20°C
Pharmaceutical Refrigerator with Freezer

MPR-N450FH
115V / 220-240V

Compared to MPR-414F

\$152.16 saved

Electricity bill per year: \$384.00 (Estimated) ▶ \$231.84


Power consumption: 2,400 kWh/y (Estimated)
Energy saving rate: 40%
1,449 kWh/y

Refrigerator Volume: 340L
Freezer Volume: 82L

Refrigerator
Volume: 326L
Temperature Control Range: 2°C to 14°C
(AT -5°C to 30°C, no load)

Freezer
Volume: 136L
Temperature Control Range: -30°C to -20°C
(AT -5°C to 30°C, no load)

ECO natural refrigerants
iG+ inverter compressor




phcbi
PHC Corporation

<https://www.phchd.com/global/biomedical/>

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