



Sliding Door Pharmaceutical Refrigerators

MPR Pharmaceutical Refrigerators

MPR-S150H-PE | MPR-S300H-PE

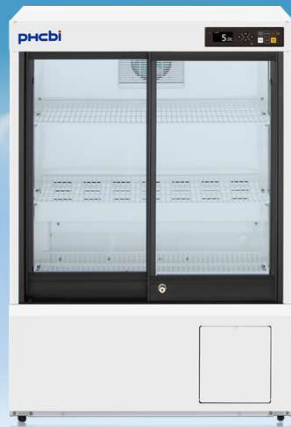


Introduction of PHCbi New MPR Series

Adoption of HC refrigerants and inverter compressor:
New lineup of MPR based on high energy-saving performance
(compared to existing models)



MPR-S300H-PE



MPR-S150H-PE

MPR Pharmaceutical Refrigerators



MPR-N450FH-PE

MPR Pharmaceutical Refrigerator
with Freezer



Adoption of HC refrigerants and inverter compressor High energy-saving performance (compared to the existing models) Reduce condensation on the glass

MPR Pharmaceutical Refrigerators

1

HC refrigerant consumes about 64%* less energy than conventional models * Compared to MPR-S313-PE AT:23 °C SV: 5 °C 230V / 50 Hz

By HC refrigerants and inverter compressor 64% energy-saving (compared with existing models). Management of Freon gas is unnecessary.

2

Reduce condensation on the glass

Use of highly insulated argon gas filled pair glass and air flow from the bottom of the door significantly reduces condensation on the door glass. Ensure high temp. performance.

3

Improved usability

New display with organic EL has good visibility and intuitive operation. USB port and log functions simplified temperature data management.



MPR-S150H-PE [165L] MPR-S300H-PE [345L]

Adoption of HC refrigerants and inverter compressor (Refrigerator compartment)

Approx. 64%^{*1} reduction compared to the existing model

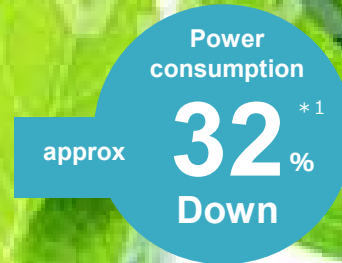
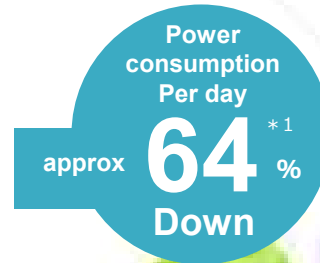
* 1 : Compared to MPR-S313-PE * 2 : AT:23 °C SV: 5 °C 230V / 50 Hz



HC refrigerants minimize environmental impact without cooling performance degradation



The newly equipped inverter compressor can control the speed of the compressor to reduce power consumption by reduction the on/off cycle which consumes power.



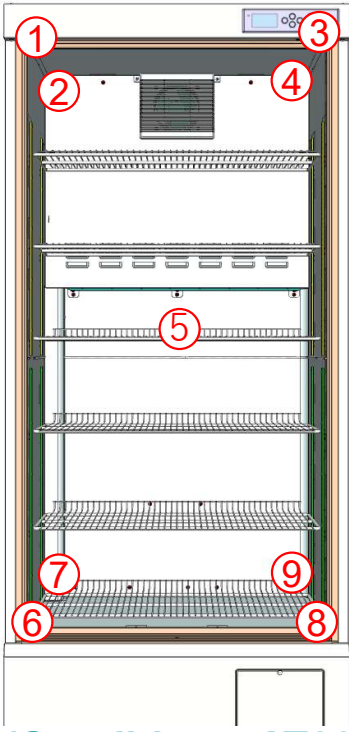
Improvement of Temp. control performance

Inverter control + New platform adoption

Ensure 2 to 8°C with Peak to Peak

Reduce Temp. fluctuation by adopting inverter compressor
Improved Temp. distribution by adopting new platform

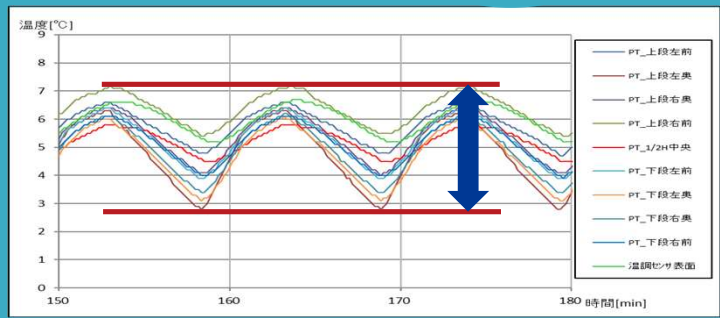
Cabinet
Peak to Peak
2~8°C



MPR-S300H-PE

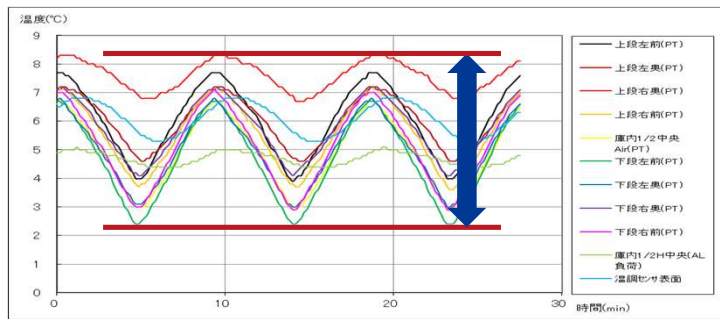
Peak to Peak : 4.4°C
Max 7.2°C, Min 2.8°C

Adjusts the compressor rotation speed in 5 steps and suppresses the peak temperature



MPR-S313-PE

Peak to Peak: 5.9°C
Max 8.3°C, Min 2.4°C



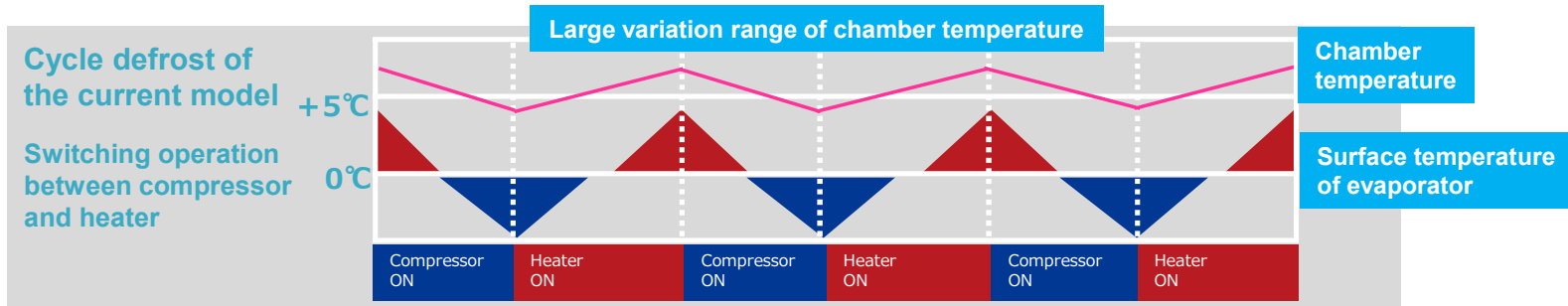
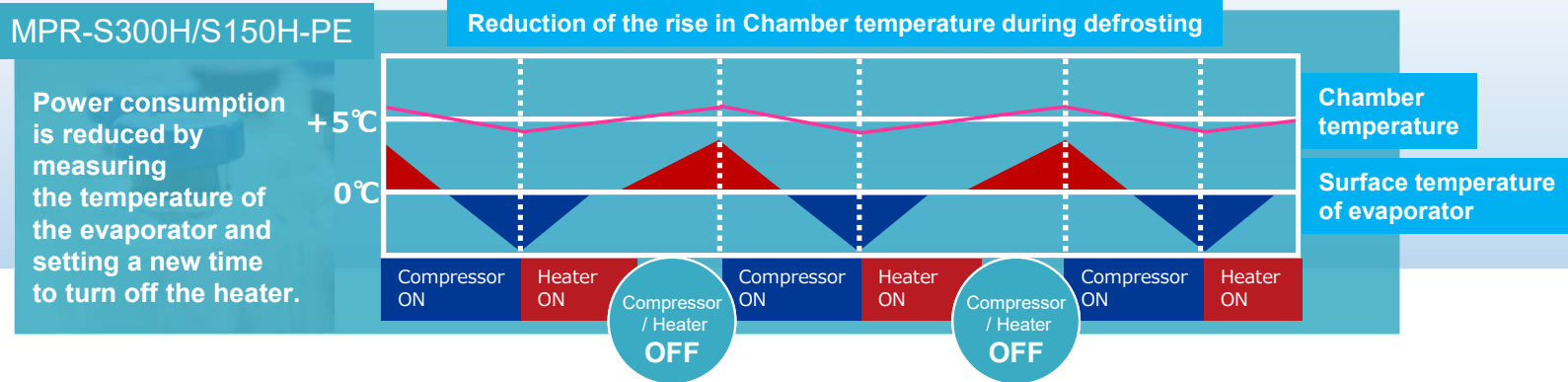
(Condition : AT23 °C, SV5 °C, 9 point method)

Temperature stability for medication & sample storage

Defrosting operation is possible without turning off the power even during defrosting, stabilizing the inner temperature.

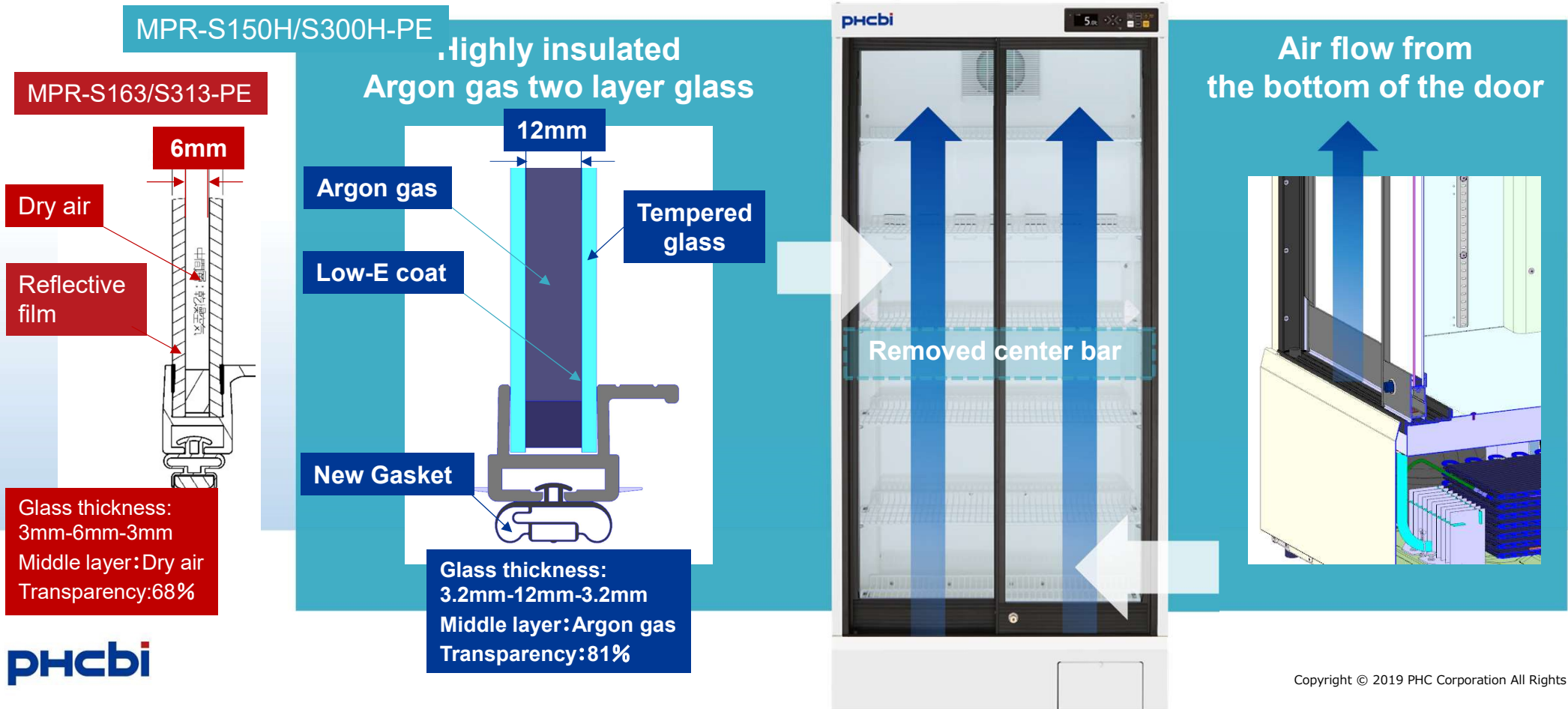
Cycle defrost

Power consumption is further reduced by detecting the temperature of the evaporator and providing time to turn off both heater and compressor.



Reduced condensation on glass door

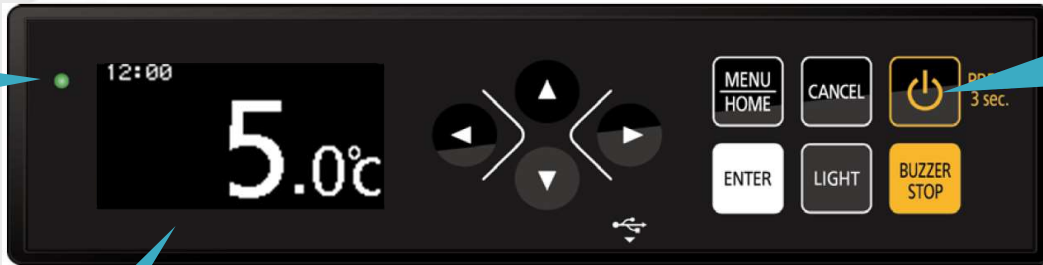
Use of highly insulated argon gas filled two layer glass and air flow from the bottom of the door
Significantly reduces condensation on the glass



New display with organic EL

More detailed temperature display with increment of 0.1°C

Power display



Power ON/OFF button on the front of operation unit

Additional display functions

- Temp. increment of 0.1°C (NSF, Selective)
- Min/Max Temp. display for every 24 hours
- Time indication (Non-applicable alarm)

Display of 24H Min/Max temperature

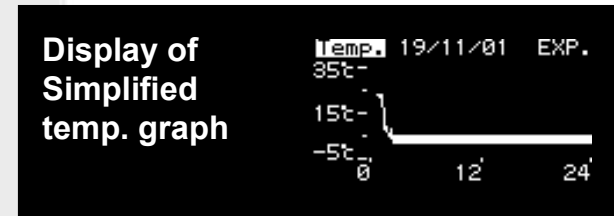
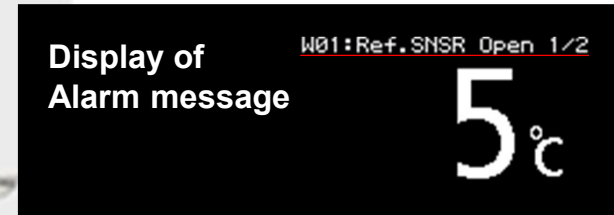
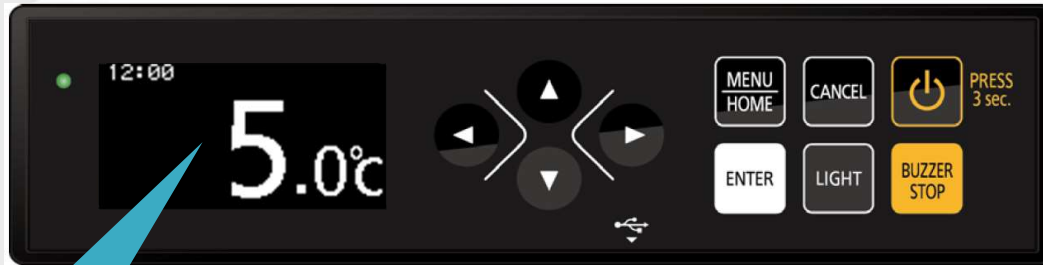
Ref. Temp: 06/19 12:00~
Max 7.4°C
Min 2.6°C

Time indication

12:00
5.0°C

New display with organic EL

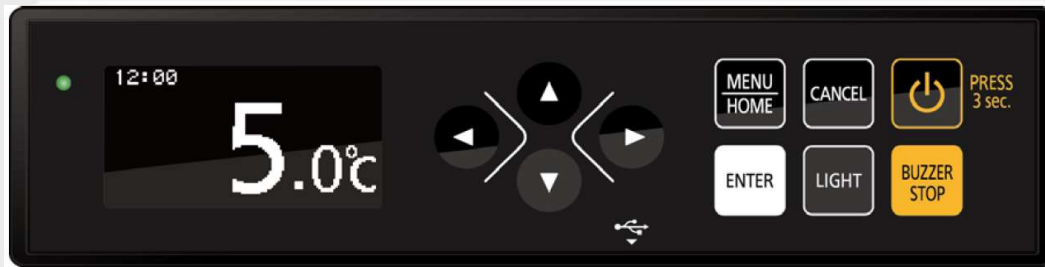
More detailed temperature display with increment of 0.1°C



- Flexible alarm settings by 1°C in high temp. / low temp.
- Display of alarm message
- Display of simplified temp. graph


New display with organic EL

More detailed temperature display with increment of 0.1°C



USB port and data log function

- Function that logs temperature, alarm, door opening/closing
- Can store a max. 3 months of data (1min. interval)
- Can export data as a CSV file



	A	B	C	D	E	F
1	MPR-450F					
2	Date	Time	Ref.Temp	Frg.Temp	Ref.Door	Frg.Door
3	2018/2/24	13:18:00	5	-30	0	0
4	2018/2/24	13:19:00	5	-30	0	0
5	2018/2/24	13:20:00	5	-30	0	0
6	2018/2/24	13:21:00	5	-30	0	0
7	2018/2/24	13:22:00	5	-30	0	0
8	2018/2/24	13:23:00	5	-30	0	0
9	2018/2/24	13:24:00	5	-30	0	0
10	2018/2/24	13:25:00	5	-30	0	0
11	2018/2/24	13:26:00	5	-30	0	0
12	2018/2/24	13:27:00	5	-30	0	0
13	2018/2/24	13:28:00	5	-30	0	0
14	2018/2/24	13:29:00	5	-30	0	0
15	2018/2/24	13:30:00	5	-30	0	0
16	2018/2/24	13:31:00	5	-30	0	0
17	2018/2/24	13:32:00	5	-30	0	0
18	2018/2/24	13:33:00	5	-30	0	0
19	2018/2/24	13:34:00	5	-30	0	0
20	2018/2/24	13:35:00	5	-30	0	0
21	2018/2/24	13:36:00	5	-30	0	0
22	2018/2/24	13:37:00	5	-30	0	0
23	2018/2/24	13:38:00	5	-30	0	0
24	2018/2/24	13:39:00	5	-30	0	0
25	2018/2/24	13:40:00	5	-30	0	0
26	2018/2/24	13:41:00	5	-30	0	0
27	2018/2/24	13:42:00	5	-30	0	0
28	2018/2/24	13:43:00	5	-30	0	0
29	2018/2/24	13:44:00	5	-30	0	0
30	2018/2/24	13:45:00	5	-30	0	0
31	2018/2/24	13:46:00	5	-30	0	0

Temperature logs (CSV)

Display of Alarm logs

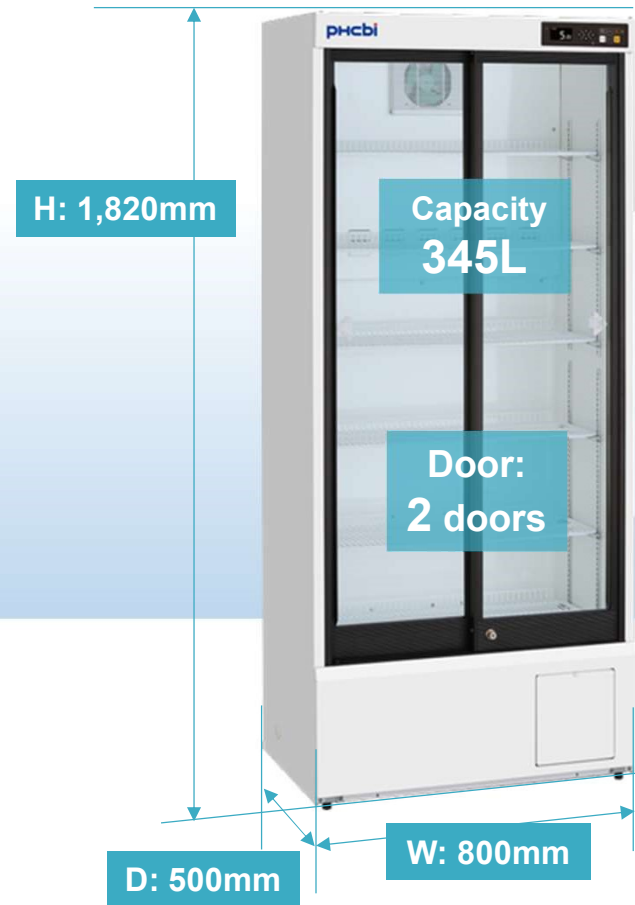
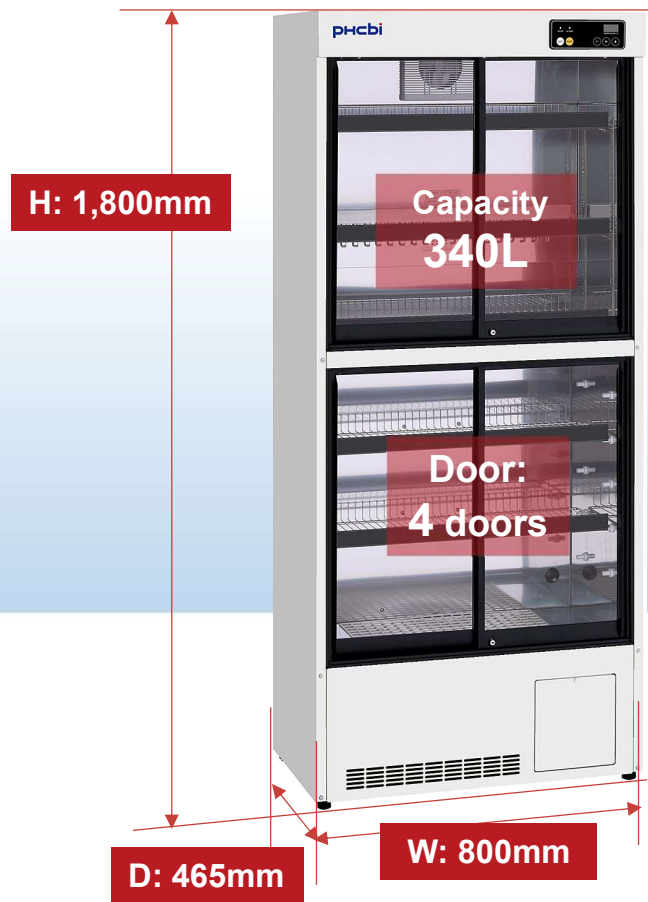
```
Alarm
18/03/05 12:00~ A01
Door Open
18/01/25 05:30~ W03
Ref.SNSR Open
18/01/01 08:45~ W10 ▾
Power Failure
```

Display of Door Opening/closing logs

```
Alarm
18/03/05 12:00~ A01
Door Open
18/01/25 05:30~ W03
Ref.SNSR Open
18/01/01 08:45~ W10 ▾
Power Failure
```

New platform improved storage efficiency

Increased capacity while maintaining an installation area and a height that is easy to access



Volume
+ 5L
※ : Compared to
MPR-S313

Volume
+ 7L
※ : Compared to
MPR-S163

New platform improved storage efficiency

Removed center bar & improved usability

MPR-S313-PE



Door opening size
approx **7%**
Up

MPR-S300H-PE



※ : Compared to
MPR-S313-PE

Removed center bar

Flexible shelf layout

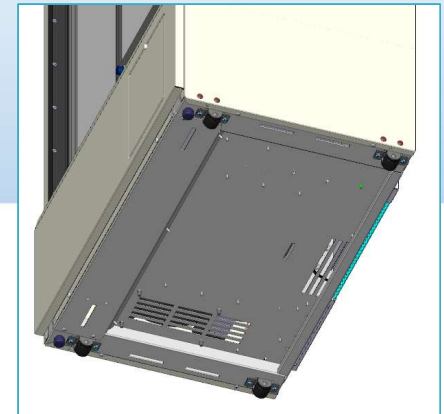
Added bottom shelf



Cylinder shaped
key



Interior light LED(2.6W)



Easy to move
Equipped with 4 casters

PHCbi MPR series line-up

100L models 300L models 500L models 700L models 1000L models

MPR Refrigerator /Freezer



176L +39L **MPR-215F/FS** 319L +130L **MPR-N450FH/FSH** 415L +176L **MPR-715F**

ECO natural refrigerants
IC+ inverter compressor

MPR Slide door type



New 165L **MPR-S150H** **New** 345L **MPR-S300H** 486L **MPR-514/514R** 1029L **MPR-1014/1014R**

ECO natural refrigerants
IC+ inverter compressor

MPR Swing door type



684L 671L **MPR-722/722R** 1364L 1359L **MPR-1412/1412R**

PHCbi

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