

Vaccine

Preservation Solutions

Refrigerators and Freezers for ideal vaccine storage



Panasonic Vaccine Storage

Panasonic offers a selection of Biomedical Refrigerators and Freezers that include significant design and performance properties. These units are more suitable for pharmacy and biomedical use than conventional household refrigerators.

Vaccine Storage

Variation in temperature can drastically affect the effectiveness of vaccines. At the same time, failure to follow proper storage and monitoring practices will result in non-compliance to regulatory standards set by governing agencies. MPR Series refrigeration is designed for specific applications while meeting the standards of the Food and Drug Administration (FDA), American Association of Blood Banks (AABB), the International Committee for Harmonization (ICH) and the Centers for Disease Control and Prevention (CDC).

Features



Advanced Temperature Controls

Digital temperature sensors inside the refrigerator and controllers are built specifically to maintain a set temperature within the 2°C to 8°C temperature range.



Precise Uniformity

The fan-forced air circulation allows for precise temperature uniformity, while the evaporator operates at 2°C. This prevents vaccines from freezing.



Temperature Stability

Efficient temperature recovery properties and minimal temperature fluctuations are maintained around setpoint.



Alarms and Monitoring

Alarms and temperature monitoring provide quick notification - both local and remote - of adverse operating conditions.

Panasonic designs equipment for specific applications while meeting the standards of the American Association of Blood Banks (AABB), International Committee for Harmonization (ICH), United States Department of Agriculture (USDA) and Centers for Disease Control and Prevention (CDC).

| MPR Series vs Domestic Refrigerator | | |
|----------------------------------------------------------------------------|------------|--------------------------|
| Product Characteristics | MPR Series | Domestic Refrigerator |
| CFC-Free, reliable temperature control not affected by ambient temperature | Yes | No |
| Digital display of chamber temperature | Yes | No |
| Precise temperature setting of chamber with microprocessor control | Yes | No |
| Digital variable temperature control of Refrigerator [2°C to 14°C] | Yes | No |
| Variable temperature control of Freezer (-20°C to -30°C) | Yes | Max/Mid/Min |
| Uniform temperature at all shelf levels | Yes | No |
| Separate operation of Refrigerator and Freezer | Yes | No |
| Window for viewing | Yes | No |
| Optimized space dedicated to storage | Yes | No |
| Access port | Yes | Some Models Yes |
| Temperature recorder (optional) | Yes | No |
| Door ajar triggers indicator light and audible alarm (optional) | Yes | Some Models Yes |
| Irregular temperature triggers alarm (optional) | Yes | No |
| Remote alarm terminal | Yes | No |
| Set temperature deviation | Yes | No |
| Self diagnostic function | Yes | No |
| Unique cycle defrost / automatic defrost system | Yes | No |
| Condensate evaporator | Yes | Yes |

MPR-215F-PA



MPR-715F-PA



Comparison of Panasonic Products with Respect to the CDC Regulatory Recommendations - November 2012

| All Refrigerators / Freezers Must: | MPR-514/1014 | MPR-215F/414F/715F | SR-L6111W | MDF-U731/M | SF-L6111W |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|
| All refrigerators must maintain required vaccine storage temperatures (2°C – 8°C) year round, preferably set at 5°C. | ✓ | ✓ | ✓ | N/A | N/A |
| All freezers must maintain vaccine storage temperatures (-15°C or below) year round. | N/A | N/A | N/A | ✓ | ✓ |
| Have automatic defrost and are free of any frost, ice, or water. | ✓ | * | ✓ | MDF-U731 - Auto MDF-U731M - Manual | Manual |
| Manual defrosters for freezers are acceptable only if the office has an alter | nate place to store | vaccines when defrosting | g the freezer. | | |
| Combination units must have separate temperature controls (thermostats) for the refrigerator and freezer. | - | ✓ | - | N/A | N/A |
| Have doors that seal tightly and close properly. | ✓ | ✓ | ✓ | ✓ | ✓ |
| Have a working thermometer placed centrally in the unit. Thermometers must be certified in accordance with National Institute of Standards and Technology (NIST) or the American Society for Testing and Materials (ASTM) standards. | Min/Max Temperature MM-125 | Min/Max Temperature MM-125 | Recorder with probe in glycol MM-120 | Recorder with probe in glycol MM-120 | Recorder with probe in glycol MM-120 |

^{*}Refrigerator only.

Proper Equipment Is Essential

Pharmacy grade or purposebuilt refrigerators and/or

freezers "are specifically engineered to have even temperatures throughout. Purpose-built or pharmacy grade refrigerators can be compact in size, thus making them ideal for small offices."

- National Center for Immunization and Respiratory Diseases

What Size Do You Need?

| Doses / Year | Suggested Unit |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Very high volume providers (10,000 doses / year) | Large capacity pharmaceutical grade unit: 36 cu. ft. MPR-1014 and MPR-1411, plus standard stand-alone freezer |
| High volume providers (2,000 - 10,000 doses / year) | Large capacity pharmaceutical grade unit: 17 cu. ft. MPR-721, plus standard stand-alone freezer or undercounter freezer |
| Medium volume providers (500 - 2,000 doses / year) | Medical grade refrigerator / freezer combination unit MPR-414F or MPR-715F, or stand-alone 17 cu. ft. MPR-514 refrigerator plus undercounter freezer |
| Low volume providers (less than 500 doses / year) | Medical grade refrigerator / freezer combination unit MPR-215F, or undercounter refrigerator and / or freezer |



Low-Volume Undercounter Refrigerators and Freezers

Convenient, compact undercounter refrigerators and freezers are the perfect solution for low-volume storage.

| Under-Counter Refrigerators and Freezers | | | | | | | |
|------------------------------------------|--------------|---------------------------|----------------------------------------------|----------------------------------|---------|------|------------------------------|
| Model Number | Product | Volume (cu.ft.) | Exterior Dimensions (w x f-b x h) | Temperature | Display | Lock | Voltage, Power Connection |
| SR-L6111W-PA | Refrigerator | 6.1 173 L | 23.6" x 26.2" x 34.6"* 600 x 660 x 879 mm | 1°C to 14°C Microprocessor | yes | yes | 115V, NEMA 5-15 |
| SR-L4110W-PA | Refrigerator | 4.9 139 L | 21.4" x 22.8" x 33.8" 544 x 579 x 859 mm | 4°C | no | no | 15V, NEMA 5-15 |
| SR-L4110WSEC-PA | Refrigerator | 4.9 139 L | 21.4" x 22.8" x 33.8" 544 x 579 x 859 mm | 4°C | no | yes | 15V, NEMA 5-15 |
| SF-L6111W-PA | Freezer | 5.4 153 L | 23.6" x 26.2" x 34.6"* 600 x 660 x 879 mm | -15°C to -20°C Microprocessor | yes | yes | 15V, NEMA 5-15 |
| HF-5017W-PA | Freezer | 5.0 142 L | 21.4" x 25.4" x 33.6" 544 x 645 x 853 mm | -20°C | no | no | 115V, NEMA 5-15 |
| HF-5017WSEC-PA | Freezer | 5.0 142 L | 21.4" x 25.4" x 33.4" 544 x 645 x 848 mm | -20°C | no | yes | 115V, NEMA 5-15 |

Convenient compact refrigeration in a laboratory environment. *Cabinet depth measures 24" f-b without display and 26.2" f-b with display Models SR-L4110WSEC-PA and HF-5017WSEC-PA offer additional hasp locks to accommodate a padlock.

Refrigeration Plus Freezer Combo

Panasonic Refrigerator / Freezer combination units provide superior uniformity for stable, precise temperature control and the monitoring of your vaccines, reagents and other biologicals.

| Biomedical Refrigerator with Freezer Combination | | | | | | | | |
|--------------------------------------------------|------------------------------------|-------------------------------|----------------------------------------------|--------------------------------------|------------------------------------|------------------------------|--|--|
| Model Number | Refrigerator Volume (cu.ft.) | Freezer Volume (cu.ft.) | Exterior Dimensions (w x f-b x h) | Temperature Range (forced air) | Temperature Range (cold air) | Voltage, Power Connection | | |
| MPR-215F-PA | 6.2 176 L | 1.4 40 L | 21.3" x 21.9" x 70.5" 540 x 557 x 1790 mm | 2°C to 14°C | -20°C to -30°C | 115V NEMA 5-15 | | |
| MPR-414F-PA | 12.0 340 L | 2.9 82 L | 31.5" x 23.6" x 71.1" 800 x 600 x 1805 mm | 2°C to 14°C | -20°C to -30°C | 115V NEMA 5-15 | | |
| MPR-715F* | 14.7 415 L | 6.2 176 L | 35.4" x 28.1" x 75.2" 900 x 715 x 1910 mm | 2°C to 14°C | -20°C to -30°C | 115V NEMA 5-15 | | |

^{*}Certain models will maintain SANYO logo until further notice.

High-Volume Sliding Doors Refrigerators

Panasonic's MPR series pharmaceutical refrigerators offer a complete and integrated solution for the strict and exact storage temperatures needed for pharmaceuticals, medicines and temperature-sensitive biologicals. The slim design and optional sliding shelves allow for an ergonomic easy-reach retrieval of your product.

| Pharmaceutical Re | Volume (cu.ft.) | Exterior Dimensions (w x f-b x h) | Door | Wire Shelves | Voltage, Power Connection |
|---------------------------------------|-----------------------|-----------------------------------------------|---------------------|------------------------------|------------------------------|
| KMRS34A1 (formerly MDF-311D(H)-PA) | 12.0 340 L | 31.4" x 17.7" x 70.8" 798 x 450 x 1796 mm | dual, sliding glass | adjustable | 115V NEMA 5-15 |
| MPR-514-PA | 17.3 489 L | 35.4" x 23.6" x 70.5" 900 x 600 x 1790 mm | dual, sliding glass | adjustable | 115V NEMA 5-15 |
| MPR-514R-PA | 17.2 486 L | 35.4" x 23.6" x 70.5" 900 x 600 x 1790 mm | dual, sliding glass | 1/2 adjustable, 1/2 roll-out | 115V NEMA 5-15 |
| MPR-1014-PA | 36.6 1037 L | 70.9" x 23.6" x 70.5" 1778 x 600 x 1790 mm | dual, sliding glass | adjustable | 115V NEMA 5-15 |
| MPR-1014R-PA | 36.5 1037 I | 70.9" x 23.6" x 70.5" | dual, sliding glass | 1/2 adjustable, 1/2 roll-out | 115V NEMA 5-15 |

| Laboratory Refrigerators | | | | | | | |
|--------------------------|----------------------|-----------------------------------------------|------------------------|---------------------------|---------------------------------|------------------------------|--|
| Model Number | Volume (cu.ft.) | Exterior Dimensions [w x f-b x h] | Door (glass) | Shelves (adjustable wire) | Drawers (solid roll-out) | Voltage, Power Connection | |
| MPR-721-PA | 24.2 685 L | 30.3" x 32.7" x 77.0" 770 x 830 x 1955 mm | single, swinging | 4 | _ | 115V NEMA 5-15 | |
| MPR-721R-PA | 23.7 671 L | 30.3" x 32.7" x 77.0" 770 x 830 x 1955 mm | single, swinging | _ | 5 | 115V NEMA 5-15 | |
| MPR-1411-PA | 48.2 1365 L | 56.7" x 32.7" x 76.8" 1440 x 830 x 1950 mm | double, swinging | 8 | _ | 115V NEMA 5-15 | |
| MPR-1411R-PA | 48.0 1360 L | 56.7" x 32.7" x 76.8" 1440 x 830 x 1950 mm | double, swinging | _ | 10 | 115V NEMA 5-15 | |

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