



# It's the **Quality of Cold** that determines the efficacy of internal storage conditions.

Our pharmaceutical refrigerators, Biomedical freezers and pharmaceutical refrigerator with freezers combo refrigerators/freezers represent more than fifty years of engineering excellence in cold chain storage and temperature controlled products. From the refrigeration platform to the control center and cabinet configuration, each model delivers an extra measure of protection for safety and viability of high value pharmaceuticals not possible in household or commercial cabinets.



Life Science Innovator Since 1966

PHC Corporation, Biomedical Division

# **High Performance Refrigerators and Freezers**

Designed for Vaccine, Pharmaceutical and Medical Product Storage.



PHCbi storage cabinets are designed to meet current The US CDC (Centers for Disease Control and Prevention) pharmacy guidelines for safety and performance.

Use of non-compliant household or domestic refrigerators for pharmaceutical storage is unsafe and costly. It creates liabilities for any audited dispensing pharmacy or health agency that cannot assure the efficacy of vaccines associated with government funded

programs or other public health initiatives. The combination of temperature control accuracy, interior temperature uniformity, quick recovery, resistance to high ambient temperature and multiple monitoring processes delivers a quality of cold that characterizes PHC Corporation's commitment to engineering, storage safety and reliability.

### ACCURACY

PHCbi pharmaceutical refrigerators are factory pre-set at 5°C to assure interior storage temperature is sufficiently above the risk point of temperature-sensitive vaccines and other liquid-based pharmaceuticals.

#### UNIFORMITY

Quality of cold starts with interior temperature uniformity which assures safety of stored products regardless of location within the refrigerator.

## DEFROST

The cycle defrost and evaporator temperature sensor system ensures that defrost occurs only when necessary and automatically, so there is no need to turn off the power for defrosting. Irregular temperature increase during defrost is minimal with no temperature spikes. The evaporation heater also doubles as protection against drops in cabinet temperature caused by a low ambient temperature.

# **AMBIENT TOLERANCE**

PHCbi pharmaceutical refrigerators and biomedical freezers are designed to maintain the quality of cold in warm ambient conditions where temperature recovery, tolerance for brown-out electrical supply on hot days and busy door opening traffic are common.

PHCbi MPR Series Pharmaceutic	cal Refrigerators and Freezers vs Domes	tic/Household Products
Performance	MPR Series	Domestic/Household
Precise Temperature Setting, Digital Display	Microprocessor Control, ±2.0°C Accuracy	_
Uniform Top-to-Bottom Temperature	Forced Airflow, ±3°C	_
Fast Temperature Recovery	Reserve Cooling Power	_
Ambient Temperature Protection	High Performance Insulation	_
Protection from Vaccine Freezing	Tight Temperature Uniformity To Protect Stored Product From Freezing	_
Design Attributes	Specifically for Vaccine/Biological/ Pharmaceutical Use	_
Dual Panel Glass Door	Transparent UV Screening	—
Integrated Systems Supervision	Microprocessor Monitoring	_
Deviation Alarms	Temperature, Door Ajar	—
Remote Alarm Terminal	Standard NO/NC/C – DC 24V 2A Connection	_
Self-Diagnostic Functions	Continuous	—
Access Ports for Independent Probes	Yes	_
Automatic Defrost on Demand, Cycle Defrost	Maintains Stored Product Temperature	_
Independently Controlled Freezer Section	Refrigerator with Freezers Freezer Units Only	_

MPR-514R MPR-1014R MPR-722R MPR-1412R *Limited countries and regi		UTICAL KEFK	IGERATORS			Refrigerator	PHARMA	ACEUTICAL R	EFRIGERAI	JKS WITH FRE	EZERS	Freezer
	//////////////////////////////////////		MPR-514	MPR-1014	MPR-722	Щ Щ Щ Щ Ц Ц МРR-1412		MPR-414F		MPR-N450FH*	MPR-N450FSH*	MPR-715F
	-30°C, -40°(	C BIOMEDICAL	L FREEZERS									Freezer
MDF-MU539P MDF-U731M MDF-MU339HL MDF-U5312 MDF-MU500H MDF-U443 MDF-MU549PHL MDF-U5412 MDF-137 MDF-237 MDF-437 MDF-437 MDF-437 MDF-437 MDF-437 MDF-437 MDF-438 MDF- {NDF-NU58 MDF-438 M			-3	0°C			-40°C					

PHCbi vaccine/pharmacy refrigerators and biomedical freezers are available in a variety of configurations, Pull-out wire baskets or pull-out solid drawers are available on select models.

Specifications are subject to change without notice



PHC Corporation