



Helmer Scientific, Noblesville, Indiana  
www.helmerinc.com

## Technical Data Sheet

### High-Performance, Medical-grade Refrigerator

Model: HBR458-GX, Horizon Series™ Blood Bank / Pass-Thru

Application, Rating, & Electrical Data	
Application	High performance storage of blood and other medical and scientific products
Storage Volume	58.5 cu ft   1656 L   864 Blood bags
Temperature Range	+2°C to +10°C
Set Point	+4°C
Electrical Power	115V 60Hz   220-240V 50/60Hz
Maximum Current	6.3A   3.5A
Facility Supply Rating	Branch circuit with earth ground, meeting plug/cord ratings as well as local electrical safety codes and requirements 110-120V AC: 15 A (minimum) 220-240V AC: 10 A (minimum)
Power Plug/Power Cord Length	NEMA 5-15 hospital-grade   115V 60Hz, 8 to 10 ft (2.4-3.0m) Inquire about additional plug/cord options
Certification/Agency Listing	QPS (Certified to UL and CSA Standards) IEC/UL61010-2-01: 2016   IEC 61010-1:2010, AMD1:2016
Indoor/Outdoor Use	Indoor use only, non-residential
Application Environment	Non-corrosive, non-flammable, non-explosive
Ambient Operating Temperature	+15°C to +32°C   +59°F to +90°F
Refrigeration	
Refrigeration System	VCC compressor-based, forced-air hydrocarbon
Compressor	Hermetic, variable speed (VCC). Rated speed range: 3500-4500 rpm
Condenser Type	Air-cooled fin and tube, sealed
Expansion Device	Cap tube
Evaporator Type	Direct expansion with forced-air fin and tube
Defrost Method	Automatic
Refrigerant	R290, Propane, EU F-Gas and EPA SNAP compliant
Controller / Configuration Settings	
User Interface	LED digital display, °C or °F
Power Switch	On/Off
Controller Type	Microprocessor with alarm/monitor
Security	Lockable doors, key locks
Control Sensor	RTD, stainless steel
Communication Ports	Remote alarm contacts
Power Failure Alarm	Yes
High/Low Alarms	Yes, fully adjustable
Door Ajar Alarm	Yes
Min/Max Temperature	Yes, display and reset
Chart Recorder	Yes, integrated, 4" (102mm) diameter, inkless pressure-sensitive charts, backup battery
Temperature Monitoring Ballast	Yes, 4 oz bottle with screw cap, solid ballast optional
Battery Back-up	Yes, 9V, non-rechargeable, lithium
Performance Characteristics	
Uniformity   °C	+/-1.0
Recovery to 8°C after 3 min door opening   min	6
Stability   °C	2.3
Energy Consumption   kWh/day	6.58
Noise emission   dB	54
Heat Rejection / Emission   BTU/hr	2002
Pull-down time to 4°C   min	45

All performance data from 58 cu ft refrigerator, 25°C ambient, 4.0°C



