The patented TwinGuard -86°C upright freezer is powered by a unique concept of two independent auto-cascade cooling circuits that work together, both independently and concurrently, to provide continuity in stored product protection over a range of real world conditions.

**Ultimate Sample Protection**

The dual cooling system offers the highest level of sample protection through the use of two independent refrigeration systems that maintain -86°C temperature. The two circuits work together for fast temperature recovery, while the secondary system keeps the temperature at -70°C if a service event occurs.

**Efficient Sample Storage**

The use of VIP® Plus cabinet and door insulation, combined with a newly designed refrigeration system layout ensures a capacity of 576 2” storage boxes, requiring only 9.78 sq.ft. (0.91 m2) of floor space.

**Security Control and Monitoring**

An eye level, door mounted color LCD touchscreen allows full user control while the USB port makes transferring logged data to a PC convenient. All performance attributes are displayed and an internal time/temperature log is expressed in graphic form.

**Valuable Sample Storage**

With two independent systems, each sustaining ultra-low temperatures, your samples remain safe. Optional CO2 backup provides an extra layer of protection.

**EZlatch**

EZlatch is the centerpiece of a holistic inventory access and frost mitigation system. The simplified, one-handed, comfortable operation keeps TwinGuard upright freezers operating at maximum energy efficiency.

**Ease of Use**

The display panel includes a comprehensive alarm system with audible and visual warnings, unit diagnostics, running temperature log and predictive analytics.
**Improved Temperature Performance**

The TwinGuard -86°C upright freezer design provides optimal temperature stability and uniformity. During routine door openings, the insulated inner doors minimize the loss of cold air even when the outer door is open.

**Temperature Uniformity Data:**

<table>
<thead>
<tr>
<th>Temperature (°C)</th>
<th>-88</th>
<th>-84</th>
<th>-80</th>
<th>-76</th>
<th>-72</th>
<th>-68</th>
<th>-64</th>
<th>-60</th>
<th>-56</th>
<th>-52</th>
<th>-48</th>
<th>-44</th>
<th>-40</th>
<th>-36</th>
<th>-32</th>
<th>-28</th>
<th>-24</th>
<th>-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time (hours:minutes)</td>
<td>0:00</td>
<td>0:30</td>
<td>1:00</td>
<td>1:30</td>
<td>2:00</td>
<td>2:30</td>
<td>3:00</td>
<td>3:30</td>
<td>4:00</td>
<td>4:30</td>
<td>5:00</td>
<td>5:30</td>
<td>6:00</td>
<td>6:30</td>
<td>7:00</td>
<td>7:30</td>
<td>8:00</td>
<td>8:30</td>
</tr>
</tbody>
</table>

**Dimensions**

Unit: inch | mm

- Exterior dimensions of cabinet excluding handle, rear stand-off brackets and other external projections. Consult product web page for doorway entry instructions, less than 36.8”.
- Current warranty offered at time of printing and may be subject to change; US and Canada only.
- Air temperature measured at freezer center, ambient temperature +30°C, no load.
- Nominal value, background noise 20 dB(A).
- Requires sensor cover MTR-DU700SF-PW.

**Specifications are subject to change without notice.**

For latest specification information contact PHC Corporation of North America at info@us.phchd.com.