

**Family Welfare Division**  
**Specification of Ice Lined Refrigerator (ILR)**

<b>S.N.</b>	<b>Specification</b>	<b>Bidders Remarks</b>
	<b>Manufacturers</b>	
	<b>Brand</b>	
	<b>Type/ Model</b>	
	<b>Country of origin</b>	
<b>1</b>	<b>Description of function</b>	
<b>1.1</b>	Ice lined refrigerators are used to store temperature sensitive vaccines/medicines.	
<b>2</b>	<b>Operational requirements</b>	
<b>2.1</b>	Only one vaccine storage compartment	
<b>2.2</b>	To maintain the temperatures of +2 °C to 8°C on minimum 8 hours electricity per day	
<b>3</b>	<b>System Configuration</b>	
<b>3.1</b>	Single compartment with voltage stabilizer as specified in 6.3	
<b>4</b>	<b>Technical Specification</b>	
<b>4.1</b>	Net storage capacity, minimum 50 liters with shelves/basket in place	
<b>4.2</b>	<b>Construction:</b> <ul style="list-style-type: none"> <li>• Corrosion resistance: internal and external cabinet, lid and frame protected against corrosion. Bidders to specify the materials used for construction of internal and external cabinet.</li> <li>• CFC free insulation</li> <li>• Door with lock and handle</li> <li>• Integrated digital temperatures display LCD/LED-01 (For displaying temperature inside the system and shall operate either from electrically or solar power).</li> </ul>	
<b>4.3</b>	<b>Refrigerant:</b> The refrigerator shall utilize CFC (Chlorofluorocarbon) free	
<b>4.4</b>	<b>Hold over time:</b> The refrigerator shall maintain +2°C to +8°C for minimum 48 hours during power cuts at the ambient temperature +43°C	
<b>4.6</b>	<b>Compressor:</b> <ul style="list-style-type: none"> <li>• Sealed heavy duty type</li> <li>• Starts and operates on electricity supply from 220 to 260 volts.</li> </ul>	
<b>4.7</b>	<b>Control Panels:</b> The thermostat thermometer and other visual displays like on off switch. Power indicator must be positioned	
<b>4.8</b>	<b>Temperature Record History:</b> Data loggers records minimum 30 days' temperature reading.	
<b>5</b>	<b>Accessories, spares and consumables:</b>	
<b>5.1</b>	<ul style="list-style-type: none"> <li>• Start Relay-1</li> <li>• Electronic Control Card / Thermostat - 1</li> </ul>	

	<ul style="list-style-type: none"> <li>• Capacitor - 1</li> <li>• Fuse - 1</li> </ul>	
<b>6</b>	<b>Operating environment</b>	
<b>6.1</b>	The product offered shall be designed to be stored and to operate normally under Nepal power supply, climate, temperature (+5°C to +45° C), low and high humidity conditions.	
<b>6.2</b>	Unit power supply 220-240V Ac, 50 Hz fitted with appropriate plug. The power cable must be minimum 3 meters long.	
<b>6.3</b>	<b>Voltage stabilizer:</b> Voltage stabilizer unit to fit the refrigerator shall be included. stabilizer to have the capacity of minimum 1KVA, normally operating input voltage of 110-270 V.	
<b>7</b>	<b>Standard and safety requirements</b>	
<b>7.1</b>	WHO PQS E003 Certified product .	
<b>8</b>	<b>User training</b>	
<b>8.1</b>	Must be provided on site user training including how to use and maintain the equipment.	
<b>9</b>	<b>Warranty</b>	
<b>9.1</b>	Comprehensive warranty for 2 years after installation.	
<b>10</b>	<b>Maintenance service during warranty period</b>	
<b>10.1</b>	During the warranty period supplier must ensure corrective/breakdown maintenance whenever required	
<b>11</b>	<b>Documentation</b>	
<b>11.1</b>	User manual in English	
<b>11.2</b>	Service (Technical /Maintenance) manual in English	