



“Techno -Test” S.R.L.


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**Anexa A**  
**la Termenii și condițiile de livrare**

**Detalii specifice și standarde tehnice**

**LOT 1: „Ultra Low-freezer for research laboratory, vertical, 680-750 L, - 50-86 °C”:**

	Specificatii tehnice solicitate	Specificatii tehnice oferite
	Model	BDF -86V728 ( -86 Freezer)
	Producător	Biobase Biomed Co., Ltd ( China )
	Cod produs	BDF -86V728

I.	Description of function and use		 <p>728L</p>
	Main function	<b><u>Congelator pentru laborator (Ultra Low-freezer), vertical, 680-750 L, - 50-86 °C// Vertical Deep Freezer - 50-86 °C, 680-750L, with 3 racks</u></b> suitable for use in scientific research, cryogenic test on special materials, blood plasma cryopreservation, low temperature resistance test on biological materials, biological products, etc. Suitable for use in research institutions, hospitals, the health & disease prevention system, laboratories, etc.	<b><u>(Ultra Low-freezer), vertical, 680-750 L, - 50-86 °C// Vertical Deep Freezer - 40-86 °C, 728L, with 3 racks</u></b> suitable for use in scientific research, cryogenic test on special materials, blood plasma cryopreservation, low temperature resistance test on biological materials, biological products, etc. Suitable for use in research institutions, hospitals, the health & disease prevention system, laboratories, etc.
II.	Main specifications		
	Temperature range:	- -50 °C - 86 °C.	- -40° C - 86 °C. - Temperature accuracy 0,1 °C.

	Configuration:	- Vertical.	- Vertical.
	Capacity:	- 680 -750 L.	- 728 L
	Externa Door:	- 1 external door. - Lockable door, with key lock.	- Lockable door
	Shelves:	- 3 pieces, closed with a freezing flap	- 3 pieces
	Wheels:	- Equipped with 4 wheels, to be easily moved. - Adjustable feet for levelling.	- Equipped with 4 wheels, to be easily moved. - Adjustable feet for levelling.
	Interior Material:	- Stainless steels.	- Stainless steels SS 304
	External Material:	- Cold-rolled steel with anti-corrosive coating.	- Sprayed steel plate
	Temperature display:	- Digital.	- Digital.
	Screen:	- LED. - Graphic display.	- Microprocessor control, LCD Touch Screen, LED Digital Display
	Alarm System:	- Acoustic. - Visual - High and low temperature. - Door open. - Power failure. - Voltage abnormal. - Ambient temperature abnormal.	- High and low temperature, Sensor failure, Door ajar, Power failure , Voltage abnormal, Ambient Temperature abnormal, Low voltage, Filter blocking
	Alarm setting options:	- Maximum temperature limit. - Minimum temperature limit.	- Maximum temperature limit. - Minimum temperature limit.
	Internal battery for alarm and alarm data retention:	- Yes, minimum 48 hours.	- Yes, minimum 48 hours.
	Cooling system:	- Ventilated or static.	- Direct Cooling
	Refrigerant:	- Without CFC / HCFC.	- Direct Refrigeration R290 and R170
	Noise level:	- ≤ 60 db.	- ≤ 60 db.

<b>III.</b>	<b>Electricity requirements</b>		
	Supply voltage:	<ul style="list-style-type: none"> <li>- 230 ± 10 V</li> <li>- Voltage and plugs type adapted to meet the requirement of electrical system in Moldova.</li> </ul>	<ul style="list-style-type: none"> <li>- AC110V/ 220V ± 10 %, Voltage and plugs type adapted to meet the requirement of electrical system in Moldova.</li> </ul>
	Frequency:	<ul style="list-style-type: none"> <li>- 50/60 Hz.</li> </ul>	<ul style="list-style-type: none"> <li>- 50/60Hz</li> </ul>
<b>IV.</b>	<b>Documentation</b>		
	Manufacturer's certificate	<ul style="list-style-type: none"> <li>- ISO 13485:2016 - Quality Management Systems for Medical Devices – mandatory.</li> <li>- CE Marking - Indicating compliance with European Union regulations and directives related to medical devices.</li> </ul>	<ul style="list-style-type: none"> <li>- ISO 13485:2016 - Quality Management Systems for Medical Devices – mandatory.</li> <li>- CE Marking - Indicating compliance with European Union regulations and directives related to medical devices.</li> </ul>
	Quality and safety standards	<p>EU Electrical Safety Standards Compliance:</p> <ul style="list-style-type: none"> <li>- EN 60601-1: Medical Electrical Equipment - General Requirements for Basic Safety and Essential Performance</li> <li>- IEC 61010-1: Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use</li> <li>- EN 55014 - Electromagnetic compatibility.</li> <li>- Protection class (in accordance with EN 60529).</li> </ul>	<p>EU Electrical Safety Standards Compliance:</p> <ul style="list-style-type: none"> <li>- IEC 61010-1: Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use</li> </ul>
<b>V.</b>	<b>Accessories</b>		
	<b>Freezer racks</b>		
	Quantity	<ul style="list-style-type: none"> <li>- 12</li> </ul>	<ul style="list-style-type: none"> <li>- 12</li> </ul>
	External dimensions	<ul style="list-style-type: none"> <li>- To be compatible with the internal size of the freezer</li> </ul>	<ul style="list-style-type: none"> <li>- To be compatible with the internal size of the freezer</li> </ul>
	Internal dimensions	<ul style="list-style-type: none"> <li>- To be compatible with freezers box 133*133*52 mm</li> </ul>	<ul style="list-style-type: none"> <li>- To be compatible with freezers box 133*133*52 mm</li> </ul>
	Material	<ul style="list-style-type: none"> <li>- Made of corrosion-resistant stainless steel, it can be frozen and thawed repeatedly and stored for a long time.</li> </ul>	<ul style="list-style-type: none"> <li>- Made of corrosion-resistant 304 stainless steel, it can be frozen and thawed repeatedly and stored for a long time. They can be used for sample storage in ultra-low temperature upright refrigerators</li> </ul>

			The product can withstand temperature range - 196 °C to 121 °C.
<b>VI.</b>	<b>Operation, maintenance and installation</b>		
	Operation and maintenance manual:	<ul style="list-style-type: none"> <li>- At least one set of operation, maintenance and service manuals for each equipment. The manuals to include instructions for: <ul style="list-style-type: none"> <li>o setting up the equipment</li> <li>o routine cleaning and maintenance</li> <li>o planning for periodic maintenance.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- The operational manual with all necessary instructions will be provided at the delivery.</li> </ul>
	Language of documentation:	<ul style="list-style-type: none"> <li>- Written in United Nations languages: <ul style="list-style-type: none"> <li>o at least in English and</li> <li>o mandatory in Romanian.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- English</li> </ul>
	Installation and maintenance:	<ul style="list-style-type: none"> <li>- The bidder must arrange for the equipment to be <b>installed by certified</b> or qualified personnel. Any prerequisites for installation will be communicated to the beneficiary in advance, described in detail in written form.</li> <li>- The bidder will provide a comprehensive <b>maintenance plan</b>. The cost of the maintenance plan to be defined and guaranteed over the period of warranty.</li> <li>- The supplier will provide an <b>after-sale service</b>.</li> <li>- The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace within 14 days.</li> </ul>	<ul style="list-style-type: none"> <li>- Yes, we comply.</li> </ul>
	Training:	<ul style="list-style-type: none"> <li>- The bidder will provide <b>user training</b> (including how to use and maintain the equipment).</li> </ul>	<ul style="list-style-type: none"> <li>- Yes, we comply.</li> </ul>
	Standard maintenance tools:	<ul style="list-style-type: none"> <li>- All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication material, to be included in the offer. <ul style="list-style-type: none"> <li>o Bidders to specify the quantity of every item included in their offer (including items not specified above).</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- The freezer has no consumables, does not include certain accesories.</li> </ul>

	Spare parts:	- Each assembled equipment to be accompanied by an authorized list of spare parts.	- Yes, we comply
	Warranty:	- At least <b>3 years</b> .	- 3 year- warranty period
	Remarks above:	<ul style="list-style-type: none"> <li>- The equipment offered, including its power supply, to be designed and constructed to operate properly and continuously in the conditions of the Republic of Moldova.</li> <li>- The equipment may need to tolerate high humidity (as high as 90% at 35 °C), ambient temperatures of 5–40 °C, fungi, and spikes in the electricity supply.</li> </ul>	- Yes, we comply

**Toate bunurile vor fi testate de beneficiar. Acceptarea bunurilor și semnarea actelor de recepție va avea loc după testarea pozitivă efectuată de beneficiar.**

În calitate de ofertant, confirmăm prin semnătura noastră de mai jos, că ne asumăm responsabilitatea pentru informațiile prezentate în cadrul acestei achiziții.

Data completării **08.05.2024** mun. Chișinău

Cu stimă,

Ofertant/candidat

**Gheorghe BURDILA,**  
**Techno- Test S.R.L. Director**