

**Detalii specifice și standarde tehnice**

**LOT: „Congelator pentru laborator (Ultra Low-freezer), vertical, 680-750 L, - 50-86 °C”:**

Specificatii tehnice solicitate			Specificatii tehnice oferite
Model			K64 HPL
Producător			KW
Cod produs			K64HPL
I.	Description of function and use		
	Main function	<p><u><b>Congelator pentru laborator (Ultra Low-freezer), vertical, 680-750 L, - 50-86 °C// Vertical Deep Freezer - 50-86 °C, 680-750L, with 3 racks</b></u> 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 &amp; disease prevention system, laboratories, etc.</p>	<p><u><b>Congelator pentru laborator (Ultra Low-freezer), vertical, 708 L, - 40-86 °C// Vertical Deep Freezer - 40-86 °C, 708L, with 3 racks</b></u> 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 &amp; disease prevention system, laboratories, etc.</p>
II.	Main specifications		
	Temperature range:	- -50 °C - 86 °C.	- -40 °C - 86 °C.

Configuration:	- Vertical.	- Vertical.
Capacity:	- 680 -750 L.	- 708 L.
Externa Door:	- 1 external door. - Lockable door, with key lock.	- 1 external door. - Lockable door, with key lock.
Shelves:	- 3 pieces, closed with a freezing flap	- 3 pieces, closed with a freezing flap
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.	- AISI 304 Stainless steel.
External Material:	- Cold-rolled steel with anti-corrosive coating.	- Cold-rolled steel with anti-corrosive coating.
Temperature display:	- Digital.	- Digital.
Screen:	- LED. - Graphic display.	- LED. - Graphic display.
Alarm System:	- Acoustic. - Visual - High and low temperature. - Door open. - Power failure. - Voltage abnormal. - Ambient temperature abnormal.	- Acoustic. - Visual - High and low temperature. - Door open. - Power failure. - Voltage abnormal. - Ambient temperature abnormal.
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, 48 hours.
Cooling system:	- Ventilated or static.	- Static

	Refrigerant:	- Without CFC / HCFC.	- Without CFC / HCFC. (R1270 and R170)
	Noise level:	- ≤ 60 db.	- 52 dB
III.	<b>Electricity requirements</b>		
	Supply voltage:	- 230 ± 10 V - Voltage and plugs type adapted to meet the requirement of electrical system in Moldova.	- 230 ± 10 V - Voltage and plugs type adapted to meet the requirement of electrical system in Moldova.
	Frequency:	- 50/60 Hz.	- 50 Hz.
IV.	<b>Documentation</b>		
	Manufacturer's certificate	- ISO 13485:2016 - Quality Management Systems for Medical Devices – mandatory. - CE Marking - Indicating compliance with European Union regulations and directives related to medical devices.	- ISO 13485:2016 - Quality Management Systems for Medical Devices – mandatory. - CE Marking - Indicating compliance with European Union regulations and directives related to medical devices.
	Quality and safety standards	EU Electrical Safety Standards Compliance: - EN 60601-1: Medical Electrical Equipment - General Requirements for Basic Safety and Essential Performance - IEC 61010-1: Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - EN 55014 - Electromagnetic compatibility. - Protection class (in accordance with EN 60529).	EU Electrical Safety Standards Compliance: - EN 60601-1: Medical Electrical Equipment - General Requirements for Basic Safety and Essential Performance - IEC 61010-1: Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - EN 61326-1 - Electromagnetic compatibility. - **EN55014 is not applicable to this type of freezers - **EN 60529 standard is not applicable to this type of freezers
V.	<b>Accessories</b>		
	<b>Freezer racks</b>		
	Quantity	- 12	- 12

	External dimensions	- To be compatible with the internal size of the freezer	- Compatible with the internal size of the freezer
	Internal dimensions	- To be compatible with freezers box 133*133*52 mm	- Compatible with freezers box 133*133*52 mm (each rack is able to accommodate up to 25 cryoboxes of dimensions 133x133x52 mm)
	Material	- Made of corrosion-resistant stainless steel, it can be frozen and thawed repeatedly and stored for a long time.	- Made of corrosion-resistant AISI 304 stainless steel, it can be frozen and thawed repeatedly and stored for a long time.
VI.	<b>Operation, maintenance and installation</b>		
	Operation and maintenance manual:	- 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>	- 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>
	Language of documentation:	- 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>	- Written in United Nations languages: <ul style="list-style-type: none"> <li>o at least in English and</li> <li>o in Romanian.</li> </ul>
	Installation and maintenance:	- 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. - 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. - The supplier will provide an <b>after-sale service</b> . - 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.	- The equipment will be installed by certified or qualified personnel. Any prerequisites for installation will be communicated to the beneficiary in advance, described in detail in written form. - A comprehensive maintenance plan will be provided. The cost of the maintenance plan to be defined and guaranteed over the period of warranty. - The supplier will provide an after-sale service. - 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.

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>- <b>User training</b> (including how to use and maintain the equipment) will be provided.</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>- All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication material, are included in the offer.</li> </ul>
Spare parts:	<ul style="list-style-type: none"> <li>- Each assembled equipment to be accompanied by an authorized list of spare parts.</li> </ul>	<ul style="list-style-type: none"> <li>- Each assembled equipment will be accompanied by an authorized list of spare parts needed for the operation according to manufacture recommendations.</li> </ul>
Warranty:	<ul style="list-style-type: none"> <li>- At least <b>3 years</b>.</li> </ul>	<ul style="list-style-type: none"> <li>- 3 years.</li> </ul>
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>	<ul style="list-style-type: none"> <li>- The equipment offered, including its power supply, is designed and constructed to operate properly and continuously in the conditions of the Republic of Moldova.</li> <li>- The equipment can tolerate high humidity (as high as 90% at 35 °C), ambient temperatures of 10–40 °C, fungi, and spikes in the electricity supply.</li> </ul>

**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.

NUMELE FURNIZORULUI Lokmera S.R.L.

Semnătura și ștampila autorizate \_\_\_\_\_

Locul: Chișinău

Data: 08.05.2024

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