



**Нагрівачі інфузійних розчинів, крові
та кровозамінників портативні
зі змінними картриджами
ПОСІБНИК З ЕКСПЛУАТАЦІЇ**

**Portable Heaters for Infusion Solutions,
Blood and Blood Substitutes with
Replaceable Cartridges
USER MANUAL**

**交換式カートリッジ付き輸液・血液・
代用血液用ポータブル加温器
取扱説明書**

GRS.IFU. 02-2026

Редакція 04

TABLE OF CONTENTS

INTRODUCTION	2
1. INDICATIONS FOR USE	2
2. GENERAL CLINICAL INFORMATION	2
3. GENERAL INFORMATION ON PORTABLE WARMERS	3
4. OVERVIEW OF THE WARMING SYSTEM	4
5. UNPACKING THE WARMING SYSTEM	6
6. CHARGING THE POWER SUPPLY	6
7. USING THE WARMING SYSTEM	8
8. ENDING USE AND DISCONNECTING THE WARMING SYSTEM	13
9. INTERFACE AND WARNING SIGNALS	14
10. MAINTENANCE AND CLEANING	15
11. DISPOSAL	16
12. OPERATING TEMPERATURE RANGE	16
13. SAFETY INFORMATION	16
14. WARMING SYSTEM CONTROL ERRORS AND MAINTENANCE	17
15. DELIVERY OF THE WARMING SYSTEM BY UAV	19
16. SYMBOLS	22
17. TECHNICAL SPECIFICATIONS	23
18. ORDERING INFORMATION	25

INTRODUCTION

This manual provides the user with the information necessary for the proper operation of portable warmers for infusion solutions, blood and blood substitutes (hereinafter referred to as the Warming System). This manual does not replace formal education or training in the use of intravenous infusion systems, as may be required by the regulations adopted by a particular healthcare facility.

IMPORTANT!

APPLIES TO NORMOTHERMIC AND HYPERTHERMIC WARMING SYSTEMS



**Before using the Warming System,
read this manual carefully!**

1. INDICATIONS FOR USE

The Warming System is intended to warm infusion solutions, blood and blood substitutes prior to administration. It is intended for use by healthcare professionals and paramedics in stabilization units, transport vehicles used for patient evacuation, hospitals, clinics and other settings to reduce the risk of hypothermia in the patient.

Follow the recommendations for using the Warming System with blood and blood components adopted by the relevant healthcare facility. These recommendations should describe the procedures for warming solutions when administering platelets, cryoprecipitate or granulocyte suspensions.

Some medicinal products or formulations may be heat-sensitive. Use the Warming System with such solutions with caution.

The use of in-line filters and particulate filters is not contraindicated when the physician considers them appropriate.

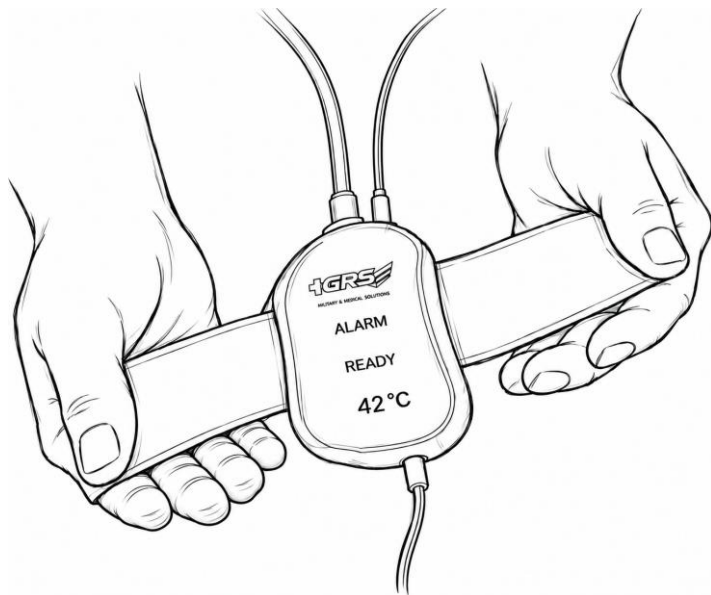
2. GENERAL CLINICAL INFORMATION

Users are assumed to be trained, before using the Warming System, in setting up and using intravenous infusion systems for administering solutions, blood and blood substitutes. This training includes, but is not limited to, aseptic techniques and standard hospital procedures.

The Warming Systems contain no materials or components that may affect the patient or the user.

When used correctly, the Warming Systems help prevent hypothermia and

complications associated with hypothermia. Use of the Warming System also improves patient comfort during intravenous infusions.



3. GENERAL INFORMATION ON PORTABLE WARMERS

The Warming System is a self-contained portable device for warming intravenous solutions. It can warm fluids or blood from 5 °C to 38 °C, or to 42 °C in hyperthermic Warming Systems, at flow rates of up to 150 mL/min.

At high flow rates and low solution temperatures, the outlet temperature may be below the nominal temperature, and battery operating time may be reduced. It is therefore recommended to maintain a steady flow and not exceed the maximum flow rate stated above.



CAUTION! A sudden change in flow rate or its abrupt interruption is prohibited. This may cause the solutions to overheat.

The temperature may fluctuate when the flow rate changes; this is normal during operation. The temperature will stabilize at 38 °C or, for hyperthermic Warming Systems, at 42 °C within a short time.

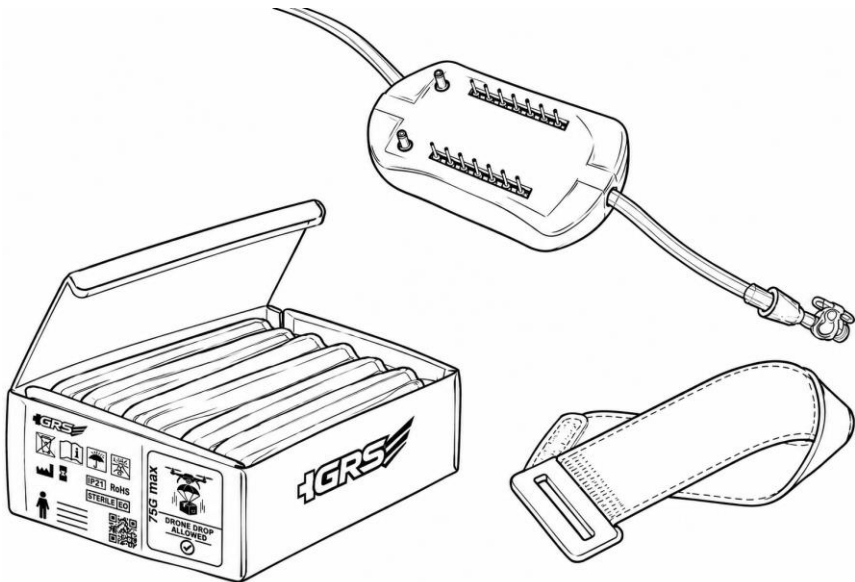
For electrical safety, the Warming System is classified as internally powered equipment with a Type BF applied part.

4. OVERVIEW OF THE WARMING SYSTEM

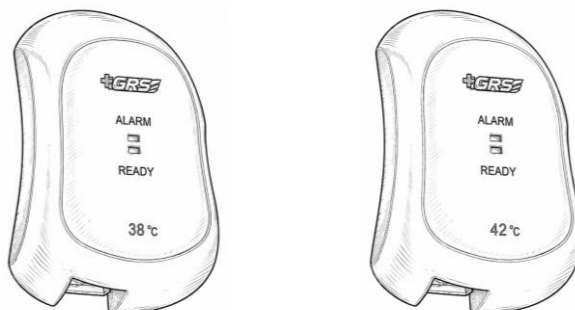
THE WARMING SYSTEM CONSISTS OF THE FOLLOWING COMPONENTS:

- I. **WARMING CARTRIDGE (STERILE)** — a Type BF applied part with an IP21 rating. Each cartridge is individually packaged and gas-sterilized. The cartridges are supplied in group packs of 10.

Each Warming System box contains a fastening strap that can be used to secure the sterile Warming Cartridge to the wrist, upper arm, thigh or another location. Each box of 10 sterile Warming Cartridges includes an additional fastening strap. The sterile Warming Cartridge is compatible with all types of control units (controllers).



II. CONTROL UNIT (CONTROLLER) — a reusable component. Available in normothermic and hyperthermic versions. The type of Control Unit (Controller) is indicated on its housing. The Controller requires no setup or operational adjustments. It is ready to operate according to a single program throughout its service life. IP21 rating.



III. POWER SUPPLY (BATTERY) — the Warming System's internal rechargeable power source. The Power Supply may only be charged when the Warming System is not connected to the patient.

Power Supplies are available in several designs and capacities, depending on the Warming System configuration and conditions of use.

In its standard configuration, the Warming System is supplied with an extended-capacity Power Supply designed to provide the maximum operating time on battery power.

Compact, reinforced Power Supplies are also available. They are intended, among other uses, for transporting and delivering the Warming System as part of a kit by airdrop from a UAV using a specialized transport and protective system.

CAUTION! Avoid allowing the Power Supply to discharge completely. Repeated deep discharge of a lithium-ion battery may accelerate the loss of its actual capacity and shorten its service life.



The actual capacity of the Power Supply (Battery) gradually decreases during use. Periodically check its condition and remaining capacity, and replace it when necessary. As a general recommendation, replace the battery every 3 years or after 500 charge-discharge cycles, whichever comes first, taking into account its actual condition and conditions of use. The Power Supply has an IP21 rating.

To charge the Warming System's Power Supply (Battery), use the UBC-01 universal charger designed for lithium-ion batteries, with an output voltage of 24 V, an output current of 1–2 A and a mains input of 220–240 V.

The charger's IP rating is indicated on its label.

5. UNPACKING THE WARMING SYSTEM

Upon receipt of the Warming System kit, open the boxes and inspect them and their contents for damage that may have occurred during transport. If any packaging is torn or otherwise mechanically damaged, or if the order is incomplete, contact your supplier immediately.

The complete Warming System is supplied in two boxes:

- **BOX No. 1** contains the Control Unit (Controller), Power Supply (Battery), universal charger and universal backup power adapter.
- **BOX No. 2** contains ten sterile Warming Cartridges, each sealed in an individual package. The individual packaging is guaranteed to maintain the sterility of its contents for 5 years.

Each box of disposable sterile Warming Cartridges includes an additional fastening strap.

 **If any of the items listed above are missing, contact your supplier immediately.**

All components are also available separately — see the “Ordering Information” section.

6. CHARGING THE POWER SUPPLY

CAUTION! The Power Supply (Battery) must be fully charged before using the Warming System.

The Power Supply (Battery) is fully charged during manufacture. However, storage time, temperature fluctuations and other factors may reduce its charge level, creating a risk that the Warming System will not have sufficient power during operation. The Power Supply should also be fully charged between uses to ensure readiness and optimal performance. Charging the Power Supply (Battery) from discharged to fully charged takes more than 2.5 hours. Charging time depends on several factors, including ambient temperature, the remaining charge and mains voltage. The optimal ambient temperature range for charging the Power Supply (Battery) is 10 °C to 40 °C.

CHARGE THE POWER SUPPLY AS FOLLOWS:



- Connect the Power Supply (Battery) to the universal charger, ensuring that the charger's flexible mains cord and plug remain accessible and unobstructed.
- Plug the charger into a mains outlet (220 V AC).
- The Power Supply (Battery) is fully charged and ready for use when all four blue LEDs light up after you press the test button.
- Unplug the universal charger from the mains outlet (220 V). You can then disconnect the Power Supply (Battery) from the charger.

When the Control Unit (Controller) is not in use, keep it disconnected from the Power Supply (Battery) to prevent the Power Supply from discharging.

7. USING THE WARMING SYSTEM



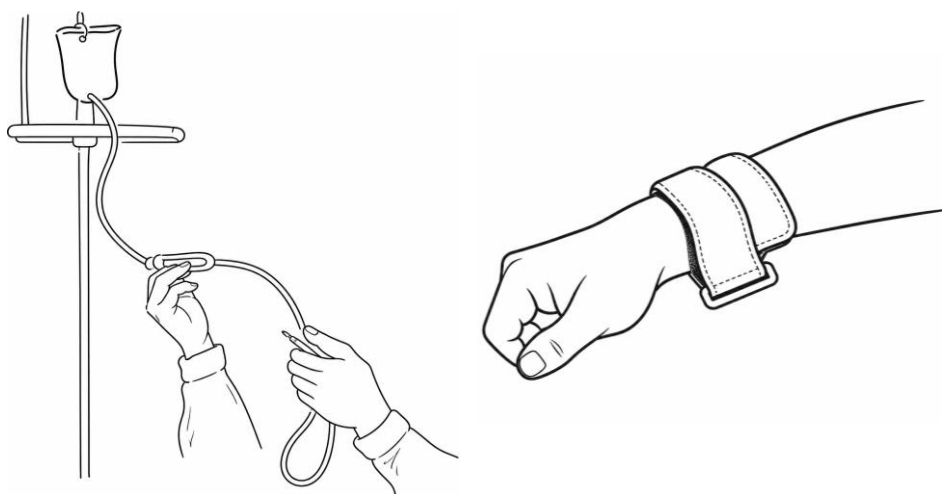
CAUTION! Do not use near flammable substances (e.g., ethyl ether).



CAUTION! Do not use in hyperbaric chambers with high oxygen concentrations.

Make sure the Power Supply (Battery) is sufficiently charged. Press the button on its panel: if all four blue LEDs light up, the battery is fully charged and ready for use. If three or fewer blue LEDs light up, the operating time will be shorter; fully recharge the Power Supply (Battery) before use.

Prepare the infusion set and connect it to the container of infusion solution in accordance with the procedures adopted by the relevant healthcare facility.



Use the auxiliary strap to position the sterile Warming Cartridge conveniently. The strap can be placed around the wrist, upper arm or thigh, depending on the type of vascular access. The clip on the sterile Warming Cartridge can be used with the strap or to attach the cartridge to another convenient location, such as clothing.



CAUTION! When using the elastic strap, do not tighten it so much that it restricts blood flow to the limb. Do not use the strap as a tourniquet to stop bleeding.

Take one sterile Warming Cartridge and check its packaging for integrity. If there is no visible damage, open the package.



CAUTION! Do not use the sterile Warming Cartridge if it is not in its original packaging.



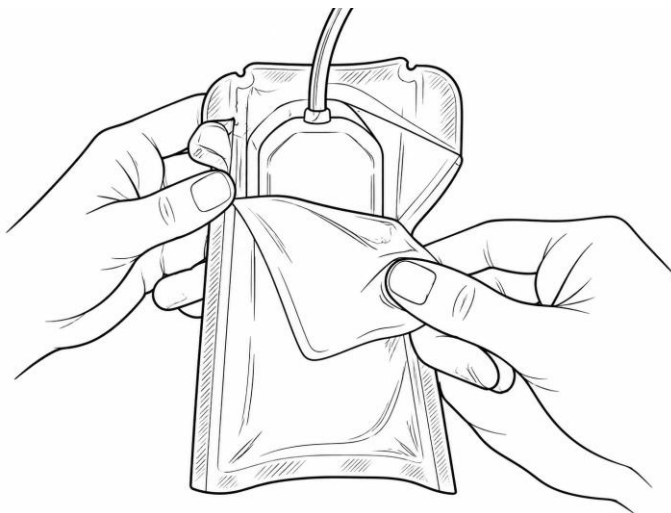
CAUTION! Check the expiry date of the sterile Warming Cartridge before use.



CAUTION! The sterile Warming Cartridge is for single use only. Do not reuse.

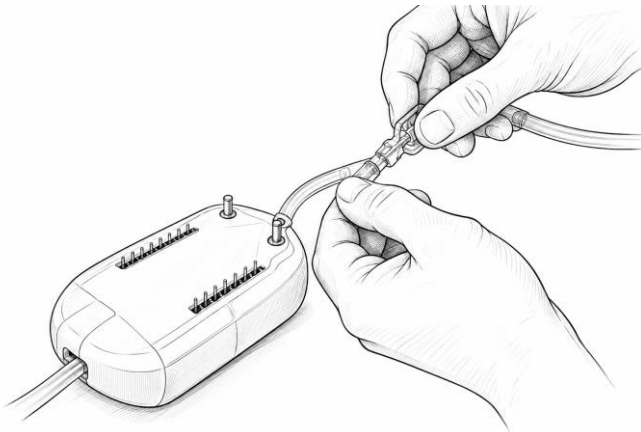


CAUTION! Do not use the Warming System outside the specified operating temperature range. Its performance may be reduced and the sensitivity of its controls may change.



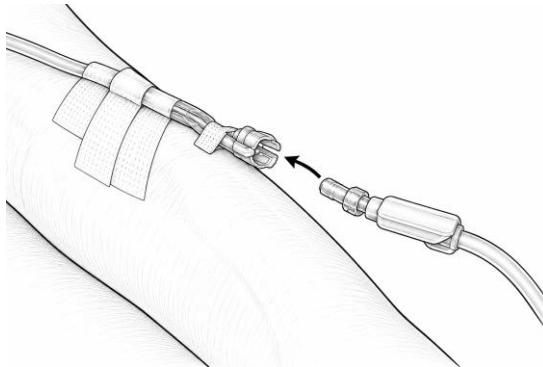
The sterile Warming Cartridge has a three-way stopcock at the inlet and a Luer connector at the outlet. Connect the inlet end of the sterile Warming Cartridge—the tube with the three-way stopcock—to the intravenous infusion set.

Prime the sterile Warming Cartridge with fluid from the infusion set and purge any air bubbles from the tubing and cartridge by allowing fluid to flow through it.



CAUTION! Carefully ensure that there is no air in the fluid container or tubing.

Use the clip to attach the sterile Warming Cartridge to the strap or another convenient location. Connect the outlet end of the sterile Warming Cartridge to the established intravenous access.



CAUTION! Ensure that the sterile Warming Cartridge does not pull on the intravenous infusion set or interfere with access to the patient.

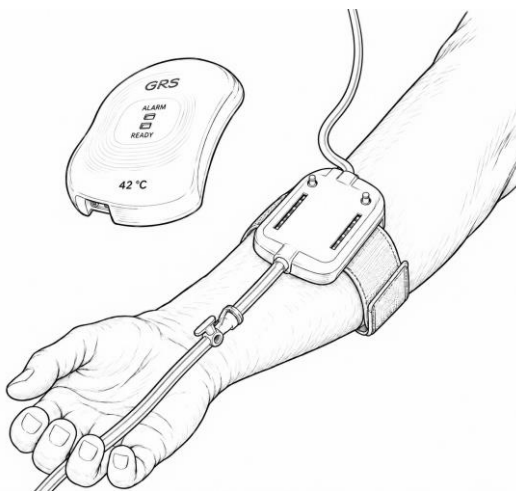


CAUTION! Carefully assess the risks associated with the selected mounting location for the sterile Warming Cartridge, taking into account hazards related to patient movement.



CAUTION! Use the standard needles supplied with intravenous infusion sets with care. During transport or unintended patient movement, they may cause injury and worsen the patient's condition.

Connect the Control Unit (Controller) to the sterile Warming Cartridge. Align the contacts on the Warming Cartridge and the Control Unit, then press them together until fully seated. The Control Unit has keyed locking features to ensure correct alignment with the Warming Cartridge.



The Warming System is now ready for use. Connect the Power Supply (Battery) plug to the Control Unit (Controller), matching it to the shape of the connector socket.

The green LED will flash during the self-test and preheating. Once it lights steadily, begin infusing the fluid.



CAUTION! Do not use the Power Supply (Battery) if it shows any signs of damage.



CAUTION! Do not connect or disconnect the Power Supply or the Warming System near flammable substances.



CAUTION! Do not remove the Control Unit (Controller) from the sterile Warming Cartridge while it is connected to the Power Supply (Battery). This may cause the Control Unit to fail.



CAUTION! Keep the Power Supply away from the patient. It may become warm during use, particularly when the Warming System is operating at full power.

When the Warming System is switched on, the flowing fluid will be warmed to the temperature indicated on the Control Unit (Controller).



CAUTION! Keep the status indicators on the Control Unit (Controller) and Power Supply (Battery) visible, and monitor them regularly.



CAUTION! A flashing red LED on the Control Unit (Controller) indicates that the temperature of the sterile Warming Cartridge has reached the upper limit of the normal range. Do not reduce the fluid flow rate. The heating element is not powered during this period, and the system cools naturally. The Warming System should resume normal operation within 30–60 seconds.

REPLACING THE FLUID CONTAINER

The Warming System automatically adjusts its heating power. Replace the fluid container as you normally would when performing this procedure.

REPLACING THE POWER SUPPLY (BATTERY)

Carefully monitor the operating parameters of the Power Supply (Battery) in use to avoid complete discharge or overheating.



CAUTION! Using a non-standard battery may cause the Control Unit's (Controller's) emergency protection system to activate and may result in Control Unit failure.



CAUTION! Do not charge the Power Supply (Battery) or service the Warming System while it is in use on a patient.



CAUTION! The patient must not operate or service the Warming System.



CAUTION! The Warming System must not be modified without the manufacturer's authorization.



Only the manufacturer of the Warming System may modify the equipment. Any modification must be followed by appropriate checks and testing to ensure that the equipment remains safe to use.

8. ENDING USE AND DISCONNECTING THE WARMING SYSTEM

- Disconnect the Power Supply from the Control Unit.
- Stop the fluid flow by slowly closing the clamp on the intravenous infusion set tubing.
- Disconnect the sterile Warming Cartridge tubing from the intravenous access and the infusion set.
- Remove the sterile Warming Cartridge from its position.
- Disconnect the Control Unit from the sterile Warming Cartridge by lifting it off the contacts.



CAUTION! Do not use excessive force or try to pry the Control Unit off. This may damage its contact assembly and cause the Control Unit to fail.

- Dispose of the single-use sterile Warming Cartridge in accordance with accepted medical standards and applicable regulations.
- Clean the Control Unit and the Power Supply (Battery).
- *For instructions on cleaning the Power Supply, see “Maintenance and Cleaning.”*
- Charge the Power Supply (Battery).



CAUTION! To avoid electric shock, connect the Power Supply (Battery) through the universal charger only to a household mains supply.

9.INTERFACE AND WARNING SIGNALS

The front panel of the Control Unit (Controller) has green and red LEDs that indicate the operating modes. When power is connected, the green LED turns on and flashes while the Warming System heats to its operating temperature.

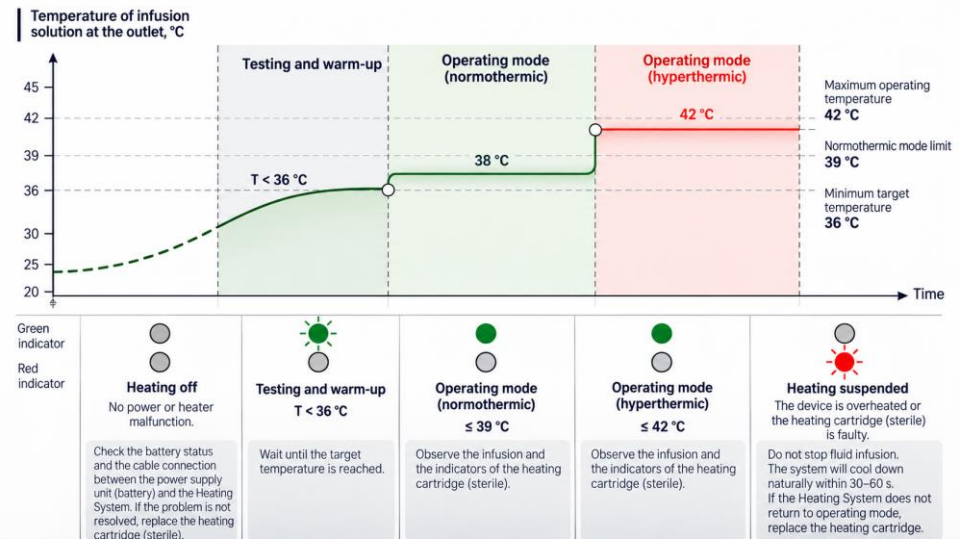
Once the operating temperature is reached, the green LED remains steadily lit.

When the fluid reaches the upper limit of the operating temperature range, the red LED turns on. In this mode, power to the heating elements is switched off. The Warming System cools as fluid continues to flow through it.



CAUTION! Do not suddenly change the fluid flow rate through the single-use Warming Cartridge. This may cause the fluid to overheat or remain insufficiently warm.

The Warming System’s status indicators and operating modes are as follows:



10. MAINTENANCE AND CLEANING



The heating cartridge (sterile) is a single-use device and must not be reused or attached to another patient!



After use, the device must be disposed of — see the “Disposal” section.

The control unit (controller) and the power supply unit (battery) are reusable components. Proper storage and a long service life are ensured by keeping them clean. After each use of the Heating System, it is recommended to:

- clean the surfaces of the control unit (controller) and the power supply unit (battery) with a swab moistened with ethyl or isopropyl alcohol and dry them thoroughly;
- visually inspect the flexible cable for cracks, kinks, and punctures.

For uninterrupted operation, it is recommended to keep the power supply unit (battery) fully charged and to check the charge level at least once every 10 days.



Do not allow liquids to enter the contact sockets of the control unit (controller).



Do not use the Heating System if liquid has entered the contact sockets of the control unit (controller).

The Heating System does not require preventive inspection, routine maintenance, calibration of its components, or servicing by maintenance personnel.

Maintenance of the control unit and the power supply unit may only be performed by the manufacturer.

Periodic testing of the essential performance and basic safety of the Heating System components during the specified service life is not required.

11. DISPOSAL



The single-use heating cartridge (sterile) may present a potential biological hazard during or after use. Handle and dispose of it in accordance with accepted medical practices and applicable regulatory requirements.

Electrical and electronic equipment — the control unit (controller) and the power supply unit (battery) — must not be disposed of together with ordinary household waste. Take the product to the nearest waste collection point for recycling.

12. OPERATING TEMPERATURE RANGE

All components of the Heating System for infusion solutions, blood, and blood substitutes operate optimally at temperatures from 0°C to +40°C.

If the Heating System has been stored at temperatures above 45°C and is switched on for normal operation, the protective system will be activated. When connected, the device will flash the red and green indicators once during the self-test period and will enter an emergency mode, which will remain active until the device has cooled down.

Allow the Heating System to cool before further use.

If the power supply unit (battery) becomes hot, replace it or allow the heated power supply unit to cool.

13. SAFETY INFORMATION

- The Heating System must be used only for its intended purpose, i.e. for warming blood and infusion fluids prior to intravenous administration in order to prevent hypothermia.
- Do not disassemble the device or attempt to repair it.
- Do not use the Heating System outside the specified operating temperature range.
- Do not use the heating cartridge (sterile) if it is not in its primary packaging.
- Do not use any components of the Heating System if they show signs of damage.

- The heating cartridge (sterile) must be securely attached to the patient's clothing using the elastic strap. If it is not secured properly, the Heating System may fall and pull out the intravenous administration system, which may cause critical injury to the patient.
- Carefully check that the fluid container and tubing contain no air, as this may result in air embolism.
- Do not position the fluid container below the patient's intravenous access point.
- Continuously observe and regularly check the Heating System status indicators on the control unit (controller) and the power supply unit (battery).
- A flashing green indicator means that the Heating System is preparing to start operation. A continuously illuminated green indicator means that the system is in operating mode and ready for fluid administration. A flashing red indicator indicates the upper heating level and automatic termination of heating. The absence of all indicator signals indicates an emergency mode accompanied by complete shutdown of the Heating System until it has cooled to the operating temperature. Disconnect the Heating System from the power supply and do not stop the flow of fluid through the Heating System.
- When the Heating System is used at high ambient temperatures, the power supply may periodically switch off to prevent overheating.
- Follow recommendations for the use of blood-warming devices that advise against warming during administration of platelets, cryoprecipitate, or granulocyte suspensions.
- Some medicinal products may be sensitive to heating. Carefully read the manufacturer's instructions regarding the heat sensitivity of medicinal products before use.
- Do not use the Heating System with infusion fluids having a pH below 3 or above 8.

14. HEATING CONTROL SYSTEM ERRORS AND MAINTENANCE

If the power supply unit (battery) does not show any LED indication after being connected for more than 2.5 hours to a functioning charger plugged into an active electrical outlet, the power supply unit (battery) is considered defective.

If the power supply unit (battery) is within the warranty period, it may be

exchanged through a licensed representative of the manufacturer.

The heating cartridge (sterile) is considered non-functional, or its temperature is considered to exceed the operating level, if the green LED does not illuminate within 10 seconds after connecting the control unit (controller) and a fully charged power supply unit (battery). Allow the single-use heating cartridge (sterile) to cool or replace it with a new one.

If the red LED indicator on the control unit (controller) flashes while fluid with an initial temperature below 39°C is passing through it, this indicates that the Heating System is malfunctioning and must be replaced.

The table below summarizes the LED behavior and the actions to be taken.

LED INDICATION AND USER ACTIONS

 + — steadily on		 + / — — blinking		 — — off	
Green indicator	Red indicator	STATUS	CAUSE	USER ACTIONS	
		 Heating off	No power or heater malfunction.	 Check the battery status and the cable connection between the power supply unit (battery) and the Heating System. If the problem is not resolved, replace the heating cartridge (sterile).	
		 Testing and warm-up	$T < 36\text{ }^{\circ}\text{C}$.	 Wait until the target temperature is reached.	
		 Operating mode	Normothermic $\leq 39\text{ }^{\circ}\text{C}$. Hyperthermic $\leq 42\text{ }^{\circ}\text{C}$.	 Observe the infusion and the indicators of the heating cartridge (sterile).	
		 Heating suspended	The device is overheated or the heating cartridge (sterile) is faulty.	 Heating is suspended; do not stop fluid administration. The system will cool down naturally within 30–60 s. If the Heating System does not return to operating mode, replace the heating cartridge.	

15. DELIVERY OF THE HEATING SYSTEM BY UAV

The blood and infusion fluid Heating System may be delivered to the point of medical care by unmanned aerial vehicles (UAVs), including by means of a controlled drop in a special transport-protective container. This method of delivery may be used when direct ground transportation of medical equipment is difficult or would require a significant amount of time.

System configuration before delivery

Before placing the System in the transport-protective container, make sure that all required components are present and intact:

- blood and infusion fluid heater;
- battery pack;
- heating cartridge (sterile) in the original manufacturer's packaging;
- straps for securing the heater;
- other components according to the specified configuration.

Before dispatch, the battery pack must have a sufficient charge level for the intended use of the System.

Single-use sterile components must remain in their sealed original manufacturer's packaging until immediately before use.



Delivery by aerial drop is permitted only for components bearing the “Approved for Aerial Drop” marking and indicating the permitted overload level.



Placement in the transport-protective container

For delivery by drop, the System must be placed in a special transport-protective container that provides:

- secure fixation of the equipment inside the container;
- protection against mechanical impact and vibration;
- protection against contamination and precipitation;
- reduction of impact loads during landing;
- preservation of the integrity of the heater housing, battery pack, and packaging of single-use components.

The components must be arranged inside the container so as to prevent free movement and mutual damage during flight, drop, and landing.

For controlled delivery, a specialized drop system may be used that stabilizes the position of the container during descent and provides impact cushioning upon

contact with the ground.

Controlled drop

Dropping the System is permitted only when using a transport-protective system designed for the relevant type of payload and previously tested for this method of delivery.

The following parameters may be used for a validated delivery system:

- drop height — up to **150 m above ground level**;
- total payload mass — up to **2.0 kg**;
- stabilization of the container during descent — by means of a stabilizing parachute;
- primary impact energy absorption — by means of an inflatable cushioning element;
- activation of the cushioning element — immediately before landing.



The above parameters apply only to a transport-protective system for which the corresponding delivery mode has been tested and verified. Dropping the heater or any of its components without a protective container is not permitted.

After landing

After landing, it is necessary to:

- locate and retrieve the transport-protective container;
- perform an external inspection of the container;
- make sure that there is no critical damage to the container and no signs of direct impact damage to the equipment;
- open the container and check whether the overload indicator has been activated;
- verify that the System is complete;
- inspect the heater housing, connectors, cables, and battery pack;
- check the integrity of the packaging of the heating cartridges (sterile);
- check the battery pack charge level;
- switch on the heater and verify that the normal start-up procedure is completed and that no fault indication is present;
- if there is no visible damage and the operational check is successful, the System may be prepared for use in accordance with Section 7, “Use of the Heating System.”



Aerial drop is not permitted without an installed overload indicator.

Do not use the Heating System if the permitted overload level has been exceeded.

Overload indicators are included in the GRS transport-protective container kit.



Restrictions after drop

Do not use the System if any of the following is detected after delivery:

- cracks or significant deformation of the housings of the Heating System components;
- damage to electrical connectors or cables;
- mechanical damage to the battery pack;
- signs of overheating, swelling, or loss of battery integrity;
- loss of integrity of the packaging of the single-use flow element;
- ingress of liquid into electronic components;
- inability to switch on the device normally;
- indication of a system fault.

Damaged components must be replaced.

If there is any doubt regarding the technical condition of the heater or battery pack after delivery, further use is not permitted until an additional inspection has been performed.

16. SYMBOLS

The following graphical symbols are applied to the components of the Heating System:

SYMBOLS AND THEIR DESCRIPTION

Symbol	Description	Symbol	Description
	Consult instructions for use		Manufacturer
	Caution		Temperature limitation
	Use-by date		Do not use if package is damaged
	Catalogue number		Do not reuse
	For use on the patient		Do not dispose of with household waste
	Do not resterilize		Keep away from sunlight
	Keep dry		Batch code
	Sterilized using ethylene oxide		Date of manufacture
	Read the instructions completely		Medical device
	Approved for UAV drop, max 75G		Can be used in active EW environment

17. TECHNICAL SPECIFICATIONS

PHYSICAL AND ELECTRICAL PARAMETERS OF THE HEATING SYSTEM COMPONENTS	
Dimensions	Heating cartridge (sterile): Not more than 6.5 cm (W); 10 cm (L); 3 cm (H). Control unit (controller): Not more than 6.5 cm (W); 10 cm (L); 2 cm (H). Power supply unit (battery): Not more than 10 cm (W); 17 cm (L); 8 cm (H); cable length 110 cm.
Weight	Heating cartridge (sterile) ≤ 130 g. Control unit (controller) ≤ 70 g. Power supply unit (battery) ≤ 800 g.
Nominal voltage of the power supply unit (battery)	24 V
ENVIRONMENTAL CONDITIONS	
Operating temperature	0 °C to +40 °C
Operating temperature of the power supply unit (battery) and charger during charging	+10 °C to +40 °C
Storage temperature	-10 °C to +50 °C
OPERATING PARAMETERS	
Maximum flow rate	150 mL/min
Target outlet temperature range	38 °C ± 3 °C for normothermic systems 42 °C -3/+1 °C for hyperthermic systems
HEATING CARTRIDGE (STERILE)	
Characteristics	Sterile, non-pyrogenic, intended for single use
Sterilization method	Gas sterilization using ethylene oxide

POWER SUPPLY UNIT (BATTERY)	
Standard charging time	2.5 hours
Number of recharge cycles	Minimum 500 cycles
Ingress protection rating of the power supply unit (battery) enclosure against dust and moisture	IP21
	QR code linking to the relevant information and training resources
CONTROL UNIT (CONTROLLER)	
Ingress protection rating of the control unit (controller) against dust and moisture	IP21

18. ORDERING INFORMATION

REF - BHC-38 —	Portable heater for infusion solutions, blood and blood substitutes with replaceable cartridges (normothermic).
REF - BHC-42 —	Portable heater for infusion solutions, blood and blood substitutes with replaceable cartridges (hyperthermic).
REF - 07.01.38 —	Control unit (controller), normothermic — 1 pc.
REF - 07.01.42 —	Control unit (controller), hyperthermic — 1 pc.
REF - BHP —	Power supply unit (battery) — 1 pc.
REF - H-Set —	Set of 10 individually packaged single-use heating cartridges (sterile) — 1 set.

Information on authorized distributors:

Developer and Manufacturer:

LLC “GRS”

60 M. Kotsiubynskoho St., Chernihiv, 14000, Ukraine

Tel.: +380 50 211 5433



UA.TR.101



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