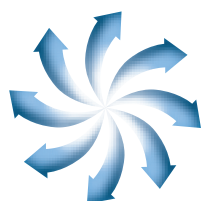


 **MERA**



UNIMO

MERA Centrifugal Blood Pump System HCS-CFP

MERA Centrifugal Blood Pump System HCS-CFP



MERA Centrifugal Blood Pump System

UNIMO UNIMO – a term coined from Unified ECMO System

The basic concept of UNIMO is that all functions (centrifugal pump, electric blender, and cold and hot water tank) can be operated with lithium ion batteries mounted on the system, and that the system can be operated for a long time although it is small and lightweight.

The centrifugal pump itself also has a nickel hydrogen battery and enables monitoring of two channels for intra-circuit pressure and one channel for oxygen saturation even when used alone.



MERA Pressure Transducer

Connection of a cable to the pressure transducer built into the PCPS circuit SOLAS provides a simple way to monitor intra-circuit pressure.



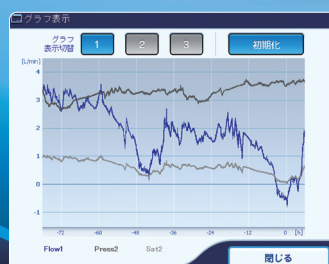
Auto-priming function

Eight steps of arbitrary setting times and rotation rates can be specified.



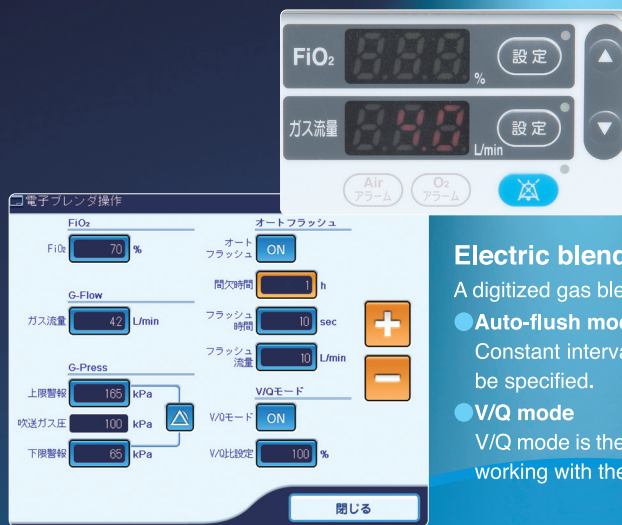
History and trend graph

A maximum of 300 alarms and other operation history events can be displayed. Blood flow rate (L/min) and arbitrarily specified values can be displayed for a maximum of 72 hours on a trend graph.



Oxygen saturation sensor

Oxygen saturation and hematocrit values in blood are monitored via an oxygen saturation cell built into the PCPS circuit SOLAS.



Electric blender

A digitized gas blender enables programming

● Auto-flush mode

Constant interval times, arbitrary times and arbitrary gas flow levels can be specified.

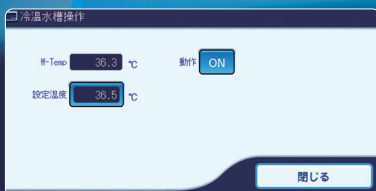
● V/Q mode

V/Q mode is the function that makes the gas flow follow the blood flow by working with the blood flow measured with a bubble sensor.



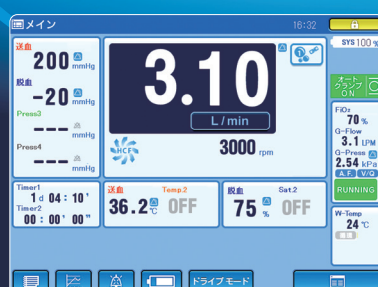
Cold and hot water tank

A cold and hot water tank, in which the use of Peltier elements provides a small-sized and battery-powered tank, can also be operated with a touch screen panel (LCD display) of the main body.



Signal tower

(standard equipment)



The availability of expanded functionality (optional) enables the inclusion of additional parameters.

Number of pressure displays: Maximum of 4 channels

Number of temperature displays: Maximum of 2 channels

Oxygen saturation displays: Maximum of 2 channels

Air bubble detection function: Maximum of 2 channels

MER A Centrifugal Blood Pump System (technical specifications)

	Driver unit as a single body	MERA Centrifugal Blood Pump System (with expanded functionality)
Electric rating	Rated voltage: 100 V AC	
	Rated frequency: 50/60 Hz	
	250 VA	1450 VA
External dimensions (in mm)	Driver unit: 255(W)×357(H)×316(D)	Complete system: 360(W)×1239(H)×600(D) (Reference) (Excluding projections)
Weight	8.1 kg	98.1 kg
Battery	Nickel hydrogen battery Continuous operation time of at least one hour (new battery charged for 24 hours)	Lithium ion battery Continuous operation time of at least one hour (new battery charged for 24 hours)
Controlled range of rotation frequency	MERA Centrifugal Pump Setting range of rotation frequency: 0, 500 to 5000 rpm (maximum rating) Centrifugal blood pump Setting range of rotation frequency: 0, 500 to 4000 rpm (maximum rating)	
Measurement range of flow rates(display range) Ultrasonic flowmeter (transit-time)	-9.9 to 9.9 L/min -9.9 to 9.9 L/min ² -99 to 999 mL/min/kg	
Measurement range of pressure	-300 to 750 mmHg: Maximum of two channels displayed	-300 to 750 mmHg: Maximum of two channels displayed
Display range of a thermometer	-5.0 to +50.0°C ± 0.2°C	-5.0 to +50.0°C ± 0.2°C: Maximum of two channels displayed
Display range of an oximeter	30% to 100% (guaranteed measurement range: 60% to 100%)	30% to 100% (guaranteed measurement range: 60% to 100%): Maximum of two channels displayed
Display range of a timer	Count-up timer Two channels hour:minute:second 00:00'00" to 23:59'59"***For measurements over 24 hours day:hour:minute 01d00:00' to 99d23:59'	
Electric blender Adjustment range of FiO ₂		21, 25% to 100% (at intervals of 5%)
Adjustment range of flow rate of gas flow		0, 0.2 to 10.0 L/min (at intervals of 0.1 L/min)
Display range of pressure of gas flow		0.00 kPa to 5.00 kPa (at intervals of 0.01 kPa)
Setting range of V/Q ratio mode		30% to 100% (at intervals of 5%)
Setting range of auto-flush mode		1 to 24 hours (at intervals of 1 hour), 10 to 300 seconds (at intervals of 10 seconds), 1 to 15 L/min (at intervals of 1 L/min)
Setting range of temperature of cold and hot water tank		15°C to 40°C (at intervals of 0.1°C)

Related products (optional)



Carrier hanger (option)

A carrier hanger (optional product) is available for a motor unit with a holder dedicated for SOLAS and is used to move "MERA Exceline Circuit HP2 PCPS Circuit SOLAS" while it is operating. Auxiliary pole holders or bedside rails can be installed with the carrier hanger.



MERA Exceline Circuit HP2 PCPS Circuit SOLAS

This product is a PCPS circuit in which the liquid-contact-type pressure sensor "MERA Pressure Transducer" and the oxygen saturation cell "MERA HSAT-1C" are built.

- Generic name: Heparin-coated cardiopulmonary bypass circuit system
- Brand name: MERA Exceline Circuit HP2

Marketing Authorization Holder
Senko Medical Instrument Mfg. Co., Ltd.

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Note

Prior to practical use, carefully read the package insert or instructions.

■ It should be noted that, because we always make efforts for research and improvement, any part of the appearance or specifications may be modified without notice.