

# HemoSphere Advanced Monitor

See advanced hemodynamic parameters with a new level\* of clarity.

The HemoSphere advanced monitor from Edwards Lifesciences reimagines the way you see, experience and interact with hemodynamic parameters.

The HemoSphere advanced monitor introduces adaptive modularity:

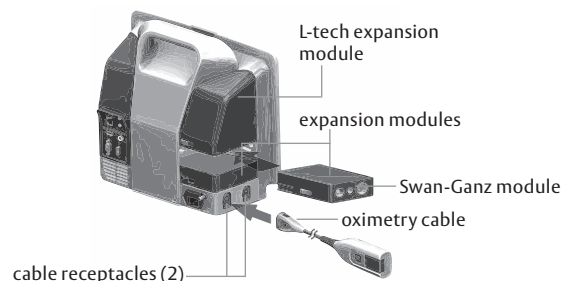
- Scalable expansion modules and interchangeable cable ports
- Wired and wireless communication
- Multiple visual clinical support screens
- Seamless and encrypted integration with hospital information systems
- Hot-swappable battery



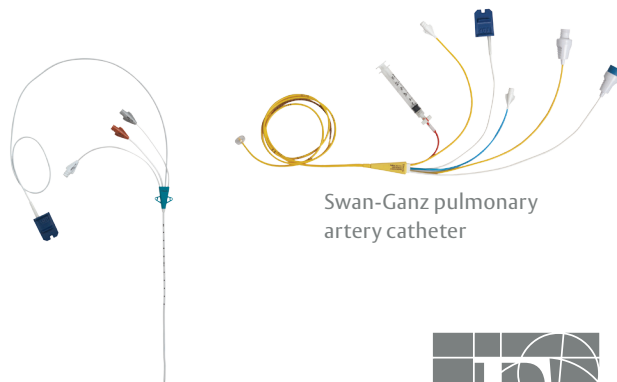
The HemoSphere advanced monitor, when used with Swan-Ganz pulmonary artery catheter or an Edwards oximetry central venous catheter, has the capability to provide:

- Central Venous Oxygen Saturation (ScvO2)
- Continuous Cardiac Output (CCO, CCI)
- Continuous Right Ventricular Ejection Fraction (RVEF)
- Continuous Right Ventricular End Diastolic Volume (RVEDV, RVEDVI)
- Mixed Venous Oxygen Saturation (SvO2)
- Pulmonary Vascular Resistance (PVR)
- Right Ventricular Stroke Work Index (RVSWI)
- Stroke Volume (SV, SVI)
- Systemic Vascular Resistance (SVR, SVRI)

\*Compared to Vigilance II monitor



The HemoSphere advanced monitor is equipped with three expansion module slots and two cable receptacles.



Edwards oximetry central venous catheter



## HemoSphere advanced monitor

Model	Description
HEMBAT10	HemoSphere battery pack
HEMEXPM10	HemoSphere expansion module
HEMLTECHM10	HemoSphere L-tech expansion module
HEMLSTD1000	HemoSphere advanced monitor roll stand
HEMKITBASE2	HemoSphere advanced monitoring system (base kit)
HEMKITSG2	HemoSphere advanced monitor with HemoSphere Swan-Ganz module
HEMKITOX2	HemoSphere advanced monitor with HemoSphere oximetry cable
HEMKITSGOX2	HemoSphere advanced monitoring platform with advanced monitor, HemoSphere Swan-Ganz module and HemoSphere oximetry cable

### Specifications

Weight	10 lb (4.5kg)	
Dimensions	Height	11.7 in (297 mm)
	Width	12.4 in (315 mm)
	Depth	5.56 in (141 mm)
Footprint	Width	10.6 in (269 mm)
	Depth	4.8 in (122 mm)
Display	Active area	12.1 in (307 mm)
	Resolution	1024 x 768 LCD
Operating system	Windows 7 embedded	

### Electrical

Rated supply voltage	100-240 VAC, 50/60 Hz
Rated input	1.5 to 2.0 amps

### Input/Output

Touch screen	Projective capacitive touch
RS-232 serial port (1)	Edwards proprietary protocol: maximum data rate = 57.6 kilo baud
USB ports (2)	One USB 2.0 (rear) and one USB 3.0 (side)
RJ-45 Ethernet port	One
HDMI port	One
Wireless communication	Connection to Wi-Fi networks that are compliant to 802.11b/g/n, minimum
Hospital information system connectivity	Health Level 7 (HL7). Integration services are subject to local availability.
Analog inputs	Selectable full-scale: 0 to 1V, 0 to 5V, 0 to 10V; > 100 kΩ (rotate symbol) input impedance; 1/8 in. stereo jack; bandwidth = 5 Hz; resolution: 12 bits+ 1 LSB of full scale
DPT pressure output (1)	DPT pressure out
ECG monitor input	Input voltage range ± 10V full scale; channel bandwidth = 0.35 to 40 Hz; resolution = ± 1 BPM; range = 30 to 200 BPM; ¼ in. stereo jack; analog cable

## HemoSphere/Swan-Ganz monitoring

Model	Description
HEMSGM10	HemoSphere Swan-Ganz module
70CC2	Patient CCO cable
*	Swan-Ganz catheters
93522	In-line temperature probe (CO-SET + closed injectate delivery system)
9850A	Bath temperature injectate probe

### Specifications

Weight	1.0 lb (0.45 kg)
Dimensions	Height - 1.36 in (3.45 cm)
	Width - 3.53 in (8.96 cm)
	Depth - 5.36 in (13.6 cm)

## HemoSphere/oximetry monitoring

Model	Description
HEMOXSC100	HemoSphere oximetry cable
*	Edwards oximetry catheter

### Specifications

Weight	1.0 lb (0.45 kg)
Dimensions	Length - 9.6 ft. (2.0 m)

## HemoSphere battery pack

### Specifications

Weight	0.9 lb (0.4 kg)
Dimensions	Height - 1.38 in (35 mm)
	Width - 3.15 in (80 mm)
	Depth - 5.0 in (126 mm)
Cells	4 x LiFePO <sub>4</sub> (lithium iron phosphate)

## Accessories required for monitoring parameters

Required accessory	Monitored and calculated parameters					
	CO	EDV	RVEF	SVR	iCO	SV
Patient CCO cable	•	•	•	•	•	•
ECG cable		•	•			•
Analog pressure input cable				•		
Injectate temperature probe					•	
Swan-Ganz thermodilution catheters					•	
Swan-Ganz CCO and CCOmbo catheters	•			•	•	•
Swan-Ganz CCOmbo V catheters	•	•	•	•	•	•

**CAUTION:** Federal (USA) law restricts this device to sale by or on the order of a physician. See instructions for use for full prescribing information.

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