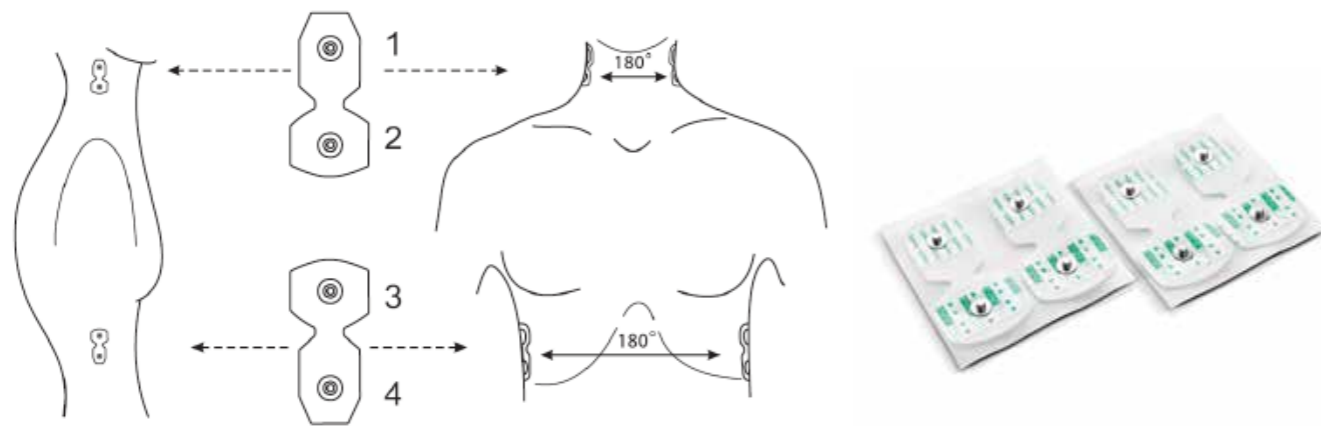


# ICG Accessories, Easy to Use

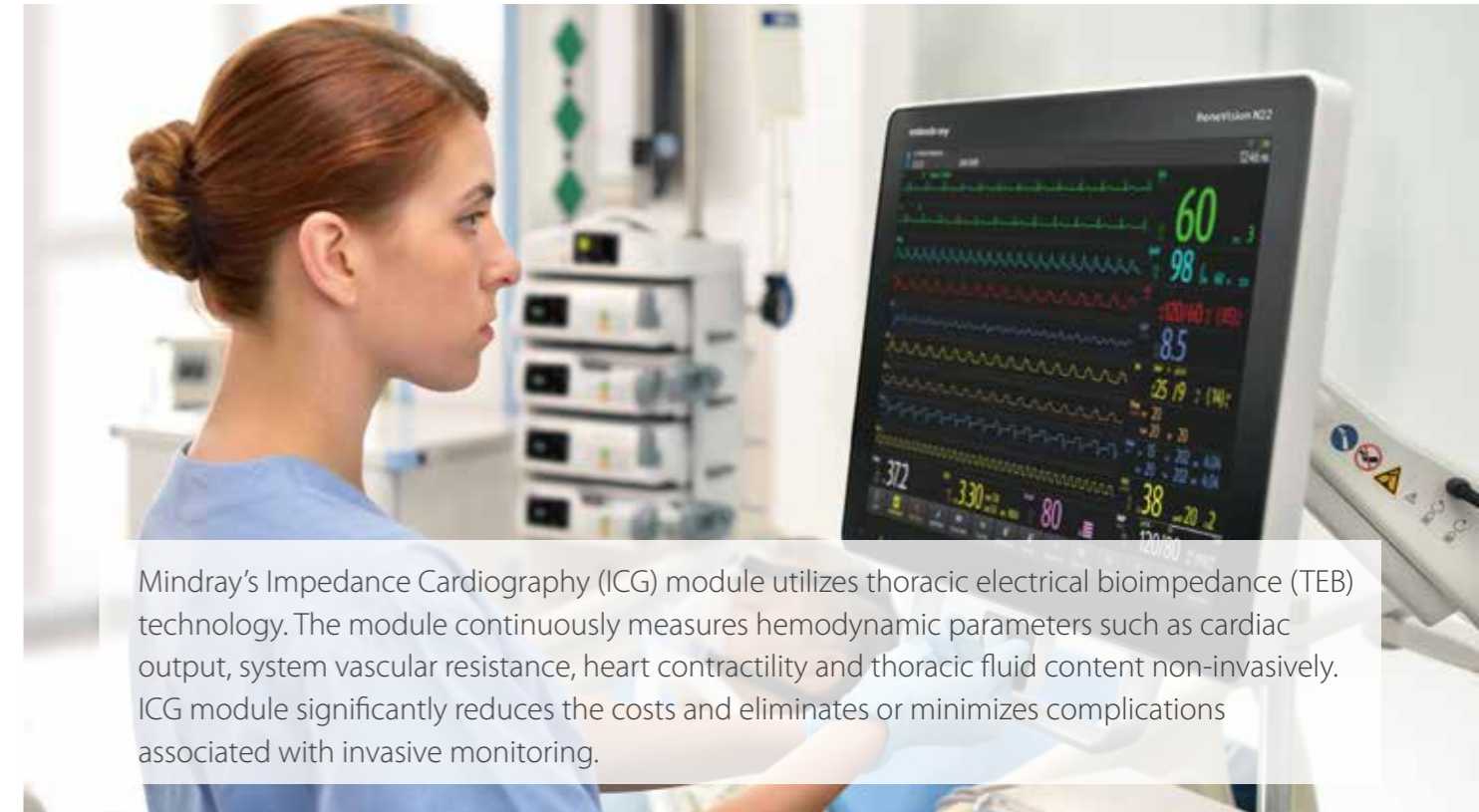
The ICG sensor and cable system ensures reproducible data and allows quick, mistake-free patient application.

- Unique connector prevents potential confusion and inaccurate data obtained with non-validated ICG sensors
- Quick-press connectors allow easy application and removal
- Differing lead wire lengths aid in fast and accurate cable connections
- Specific ICG intra-sensor distance ensures proper data transmission and receipt for reproducible parameter measurements
- Extra wide sensing sites enhance impedance detection



Measurement range	SV: 5 to 250 ml HR: 44 to 200 bpm C.O.: 1.0 to 15 L/min	
Accuracy	SV: Not specified. HR: $\pm 2$ bpm C.O.: Not specified.	
Alarm limit	Range Step	
C.I. High	(low limit + 1.0) to 15.0 L/min/m <sup>2</sup>	0.1 L/min/m <sup>2</sup>
C.I. Low	1.4 to (high limit - 1.0)L/min/m <sup>2</sup>	
TFC High	(low limit + 1) to 125/k $\Omega$	1 /k $\Omega$
TFC Low	19 to (high limit - 1)/k $\Omega$	

# Mindray ICG Module



Mindray's Impedance Cardiography (ICG) module utilizes thoracic electrical bioimpedance (TEB) technology. The module continuously measures hemodynamic parameters such as cardiac output, system vascular resistance, heart contractility and thoracic fluid content non-invasively. ICG module significantly reduces the costs and eliminates or minimizes complications associated with invasive monitoring.

The Mindray's ICG module is ideal for hemodynamic continuous monitoring, fluid management and cardio-vascular function tests of patients in anesthesia, cardiology, critical care, dialysis, emergency department and critical care transport. Main clinical benefits of the ICG module including:

- Quick, easy hemodynamic assessment
- Guide selection and optimization of medications
- Continuous data updates
- Excellent trending of data
- Virtually no patient complications
- Very cost effective



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P/N:ENG-Mindray ICG Module-210285x4P-20160513

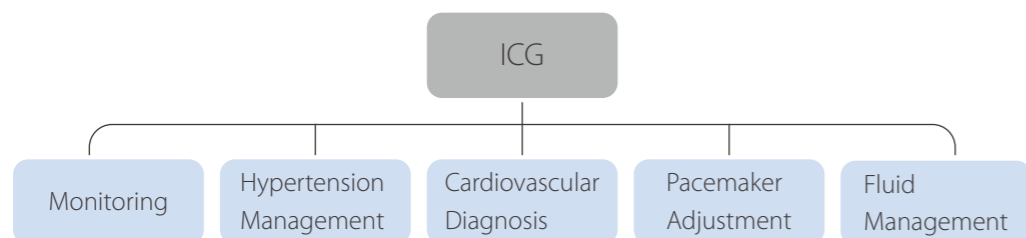
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## Non-invasive, Safer, and Timely Technology

- ICG is a safe, non-invasive, and timely method to measure a patient's hemodynamic status.
- The ICG waveform is generated by measuring the level of change in impedance in the thoracic fluid.
- Four dual sensors placed on neck and chest send and receive a low amplitude electrical current through the thorax to detect the level of change in resistance in the thoracic fluid. With each cardiac cycle, fluid levels change, which affects the impedance to the electrical signal transmitted by the sensors.



## ICG Hemodynamic Parameters

### Flow

Stroke Volume / Index (SV / SI)  
Cardiac Output / Index (CO / CI)



### Contractility

Systolic Time Ratio (STR)    Pre-ejection Period (PEP)  
LV Ejection Time (LVET)    Velocity Index (VI)  
Acceleration Index (ACI)



### Resistance

Systemic Vascular Resistance / Index (SVR / SVRI)



### Fluid

Thoracic Fluid Content (TFC)

