

# HIC-4000 Impedance Cardiograph



The HIC- 4000 model is a noninvasive instrument for detecting and monitoring bioelectric impedance cardiography signals from human subjects. It is a standalone cardiac impedance data monitoring system which acquires, displays, and produces ICG analog signals. This desktop system is housed in a compact, rugged, and well-shielded steel enclosure with a bright, clear display that indicates operation modes impedance signal values, and displays signal level graphs. The HIC- 4000 impedance cardiograph is primarily intended for impedance cardiography applications involving the assessment of stroke volume, cardiac output, PEP, and associated cardiac performance parameters including respiration. It is designed for use with human subjects where the total thoracic bioelectric impedance at 95 KHz falls within the range of 5 ohms to 100 ohms. The instrument can also be used for other monitoring applications involving the use of impedance cardiography methodology, such as the monitoring of pulmonary congestion, pulmonary edema, pleural effusion, and numerous indices related to cardiac dynamics.

## HIC-4000 FEATURES

- Monitors Basal Impedance ( $Z_0$ ),  $dZ/dT$ , ECG, Heart Sounds,  $\Delta Z$ , and Respiration.
- Bright blue display for viewing mode of operation, impedance signal values, and signal bar graphs
- Keypad controls for all functions and operational modes
- Digital Filtering options for cleaning up signals in electrically noisy environments
- Integrated ability to acquire Respiration data when used with a separate Respiration Transducer
- Simulation mode with real ICG signals and data useful for teaching applications and protocol evaluations