

## **Swisstom - BB<sup>2</sup> Sensor Belt**

Real time continuous bedside monitoring of lung function dynamics

Swisstom BB<sup>2</sup> system is based on the principles of electrical impedance tomography (EIT) where weak alternating currents are applied at the body surface, via a series of impulse emitting electrodes, and travel through the thorax along paths of least resistance thereby creating quantifiable electric potentials. These potentials are being measured continuously, by the same series of impulse emitting electrodes contained within the BB<sup>2</sup> belt, and constantly converted into real time tomographic data and images. The resulting images have been designed to intuitively present clinically relevant information in variations of lung function dynamics for timely and effective decision making.

Swisstom's disposable single-patient-use SensorBelt was designed to respect the essential needs of patients and caregivers alike. The oblique design allows the SensorBelt to follow the movement of the ribs and thus does not restrict breathing as this would be highly undesirable in patients already suffering from respiratory insufficiency. A combination of innovative 3D structural knit materials with conductive silver filaments, unique ContactAgent and highly breathable support fabric collectively ensure multi-day skin-friendliness and optimum wearing comfort.



The skin friendly SensorBelt and vest have been designed with input from nursing specialists for intuitive handling & application as well as ongoing nursing care during daily hospital routines. The SensorBelt vest can be easily applied to a lying passive patient by a lone caregiver in less than a minute.

The ergonomic design of the compact SensorBeltConnector with it's one step "plug & play" connectivity to the BB<sup>2</sup> vest and cutting-edge electronics has just a single cable running from the patient to the monitor which eliminates the potential source of many handling errors or accidents.

