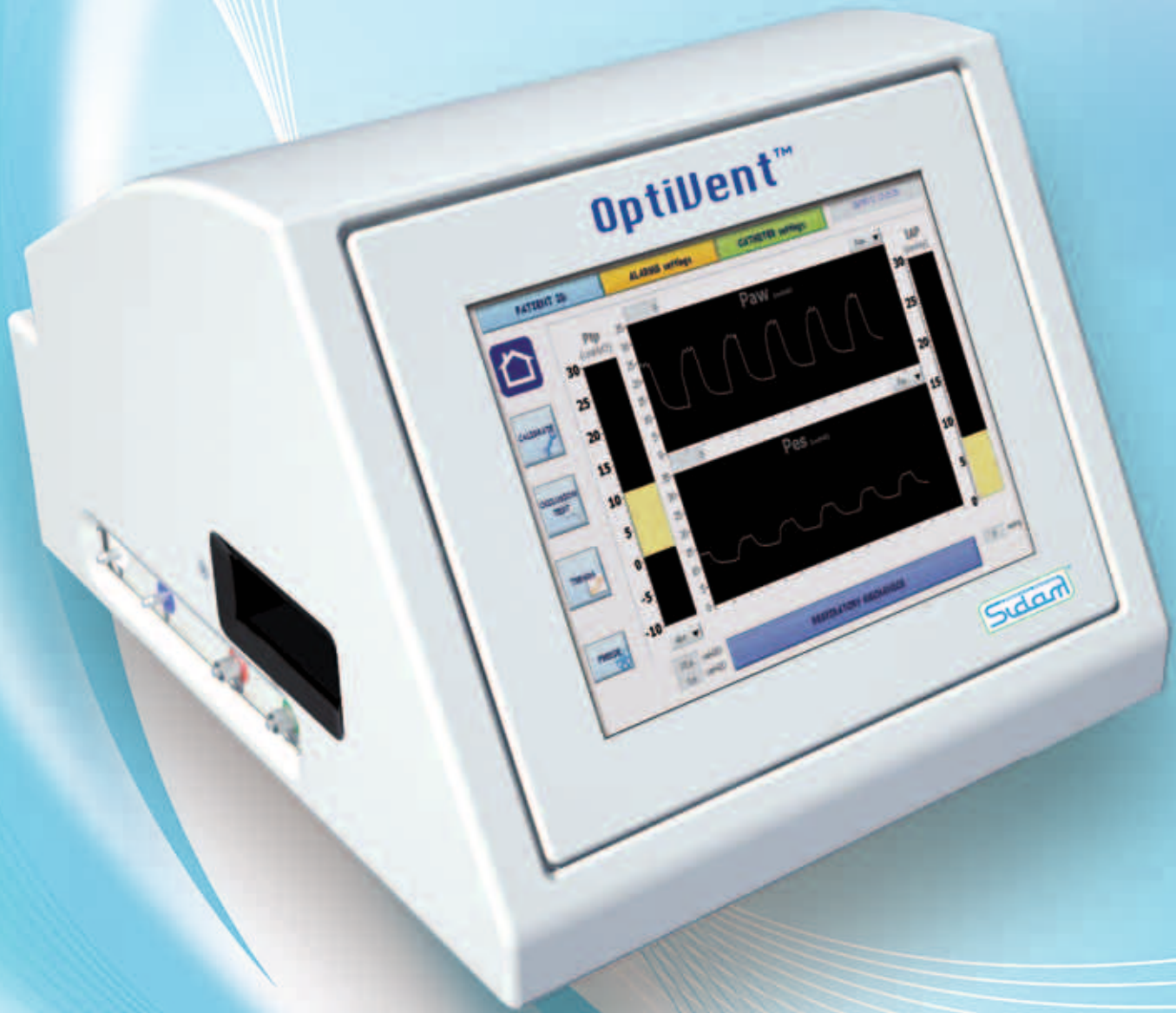
OptiVent™

Monitoring system for the management of the catheter NutriVent



MEDICAL DEVICES
Sidam®

OptiVent™

Applications

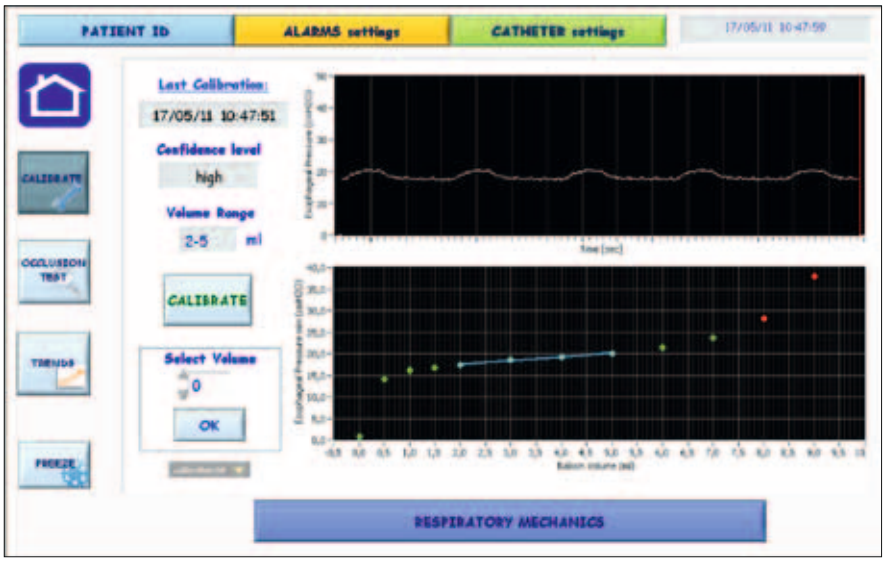
OptiVent™ is an electro-medical device for the completely automated management of the multi-functional Nutrivent™ nasogastric probe.
Among these operations are included:

- system calibration;
- setting of the pressure zero;
- support to the positioning of the nasogastric probe;
- periodic and automatic inflation and deflation of the balloons on the nasogastric probe,
- registration in continuous mode of the pressures supplied, data graphic and numeric display;
- storage of patient data;
- transfer of the data registered on the computer.

The equipment registers the flow values, current volume and pressure of the respiratory tract autonomously and, therefore, can be used in association with any type of ventilator.
The equipment is provided with a practical touch screen interface for an immediate input of the requested data and for a simple interaction with the system.
Optivent allows to register and monitor, in continuous mode, basic parameters in the management of the critical patient: transpulmonary pressure (P_{tp}), Elastance (E), Compliance (C), inspiratory effort, endoabdominal pressure P_{ga} (with NutriVent™ provided with two balloons), transdiaphragmatic pressure (with Nutrivent™ provided with two balloons).
The registration of the esophageal pressure allows to split Elastance and Compliance into their components: of the whole respiratory system (E_{rs}, C_{rs}), of the lung (E_L, C_L). of the chest (E_{cw}, C_{cw}).

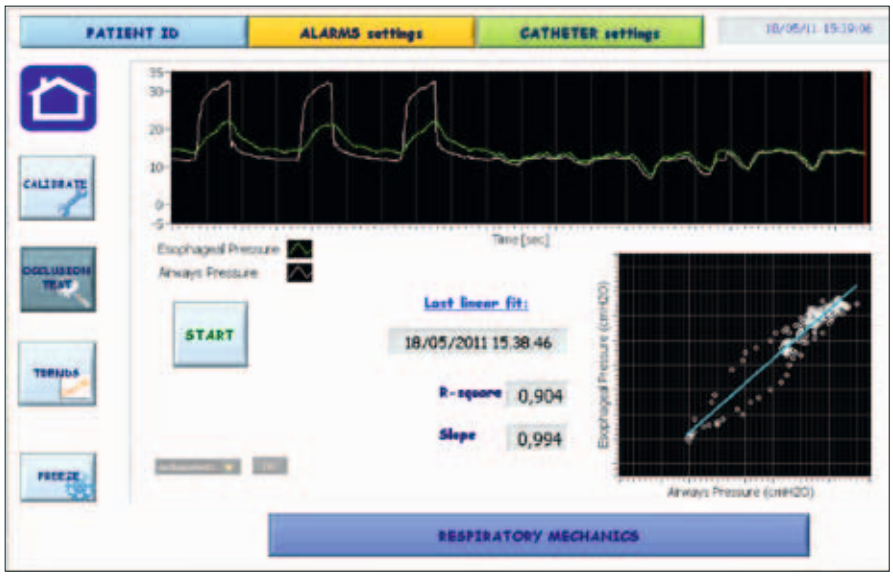
System calibration

During this operation, the software inside the device determines the most suitable inflation volume of the esophageal balloon for the single patient.
The balloon is inflated at different volumes and the software sets the best volume for the optimal transmission of the pressure signal from the patient to the equipment. Moreover, the system corrects the signal registered by eliminating the cardiac and esophageal artefact.



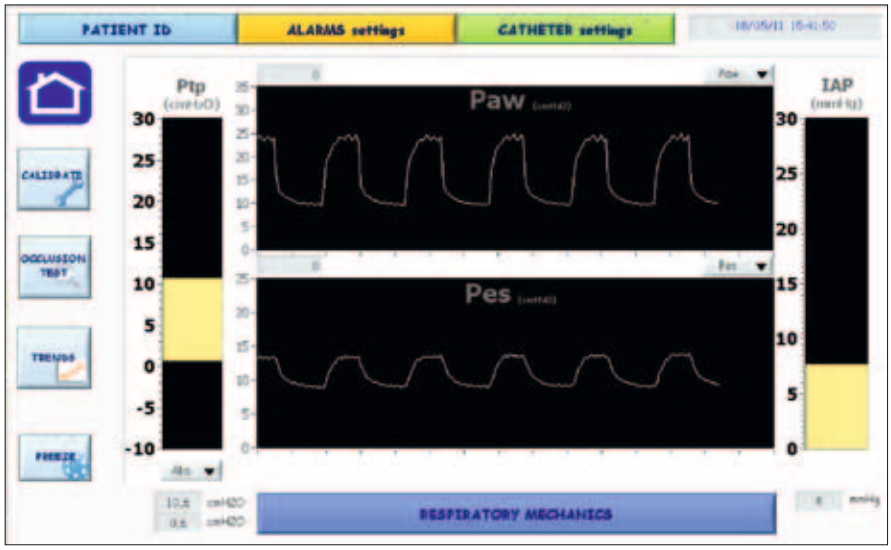
Support to the positioning of the nasogastric probe

In order to have a good reading of the pressures, it is important that the balloons are properly positioned: the esophageal balloon in the third medium/lower of the esophagus; the gastric balloon (if available) in the stomach.
In the intubated patients with spontaneous respiratory activity, it is absolutely possible to define if the position of the esophageal balloon is appropriate by performing an occlusion of the respiratory tract and checking that the variations of the esophageal pressure comply with the ones of the respiratory tract.



Registration in continuous mode of the pressures supplied, parameter calculation and their display

On the screen of the equipment are displayed two traces, which can be of pressure (esophageal, gastric, respiratory tract), of flow or of volume. The two traces can be selected by the user.
By simply pressing a button, it is possible to recall the summarizing screen page of the ventilator parameters, in all their components.



Technical data
Operation: 100 V or 220V
Consumption: 50W.

Codice	Nome	Quantità
20032001	OptiVent – Monitoring system for the management of The Nutrivent probe	1 pcs.

Cod. 51068002 - Rev 00

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