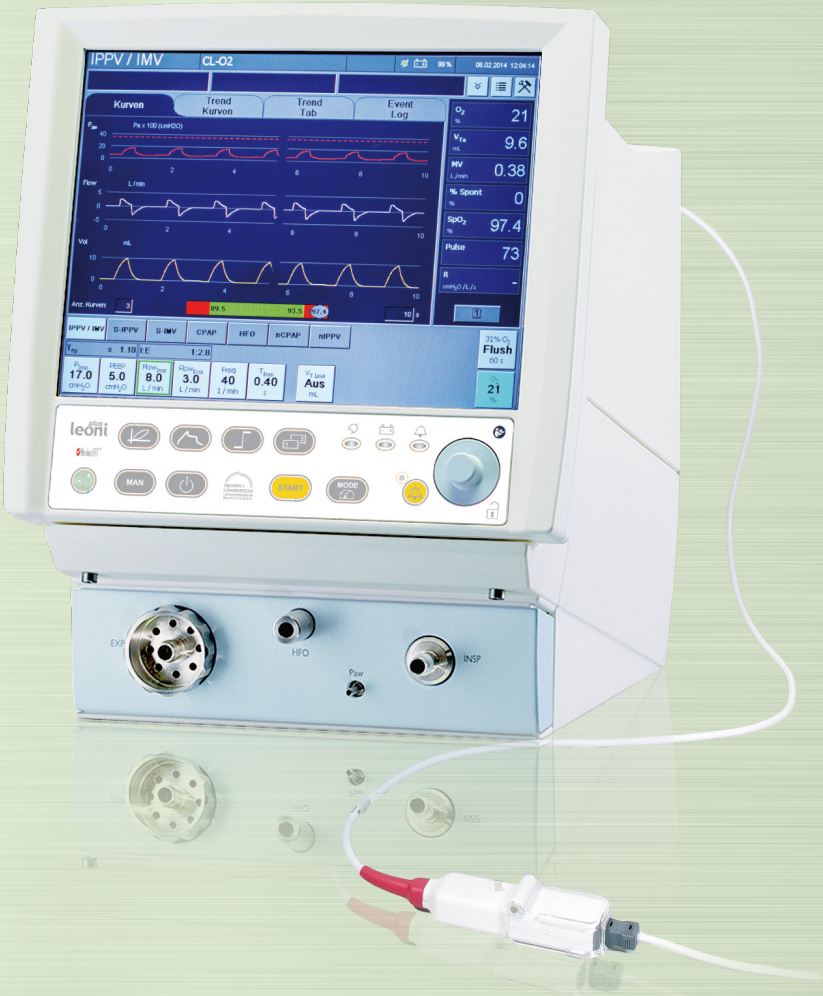
New!

LÖWENSTEIN medical



LEONI PLUS

CLAC *inside*

CLOSED-LOOP AUTOMATIC OXYGEN CONTROL

Homecare
Pneumology
NEONATOLOGY
Anaesthesia
Intensive Care Ventilation
Sleep Diagnostics
Service
Patient Support

LÖWENSTEIN MEDICAL PRESENTS

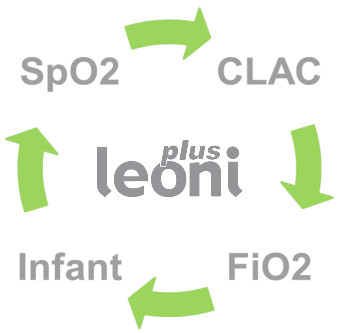
CLAC: CLOSED-LOOP AUTOMATIC OXYGEN CONTROL

The manual regulation of inspiratory oxygen (FiO_2) used to supply oxygen to premature infants, is often complicated and time-consuming. In collaboration[1] between Tübingen University Hospital and the Medical & Technical University of Vienna, a special algorithm was developed to automate the oxygen control provided to premature infants (CLAC: Closed-Loop Automatic Oxygen Control). Löwenstein Medical were able to validate these experiment results in a multicenter study[1] using the Leoni plus in daily hospital operations.

In order to make the CLAC controller operation as easy and intuitive as possible for the user, the algorithm control and pulse oximetry measurement were integrated into the Leoni plus[2]. The entire operation, including the measured data visualization and the alarm settings, is made over the respirator user interface. At a glance, the user can determine the current graphically displayed status of the patient.

CLAC takes the routine adjustment of the inspiratory oxygen (FiO_2) in inspiratory gas off the clinician's shoulders by constantly monitoring the demand and condition of the patient in adapting the equipment settings accordingly. Thus, the user is relieved of the routine tasks. The user has the possibility to switch off the automatic control at any time in order to regulate the oxygen content manually. „CLAC may improve oxygen administration to preterm infants receiving mechanical ventilation or nasal continuous positive airway pressure while reducing workload related to RMC. (Pediatrics 2014;133:e379–e385)"[1].

Art.Nr.	Description
0219880	CLAC (closed-loop automatic oxygen control) Available as option for Leoni plus purchased from 2015 on
10-2328	SpO_2 Sensor LNCS INF 3 - 20 kg Length 45,72 cm 
10-2329	SpO_2 Sensor LNCS Neo < 3 kg Length 45,72 cm 
10-2321	SpO_2 Sensor LNCS NeoPt < 1 kg Length 45,72 cm 
Optional Update for already installed Leoni plus:	
0219880-1	UPDATE CLAC (closed-loop automatic oxygen control) Option for Leoni plus manufactured before 01.07.2012
0219880-2	UPDATE CLAC (closed-loop automatic oxygen control) Option for Leoni plus manufactured after 01.07.2012



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[1] Closed-Loop Automatic Oxygen Control (CLAC) in Preterm Infants:A Randomized Controlled Trial, Hallenberger, et al., on behalf of the CLAC Study Group Pediatrics peds. 2013-1834
[2] Optional function, which can be ordered in addition
The images contain optional accessories which can be ordered in addition. Please inquire further information.
Stand 07/2017