

Chirana AURA V ✓[®]

Chirana AURA V represents pneumatic ventilation system with above-standard ventilation modes and functions that give priority to the efforts of patient and eliminates stress breathing. It is intended for neonatal, pediatric, and adult patients. It is based on the respiratory system that is able to automatically compensate the dead space of breathing circuit. Colour 15" touch screen and intuitive user interface allows easy adjustment of basic modes and their modifications, as well as optimization system of ventilation parameters, Auto-Start and multi-level ventilation (variable volume, pressure, and time). Automatic check-in tests and self-assistant calibration are integrated to the device.

Ventilation modes:

CMV, SCMV, PCV, SPCV, SIMV, SIMV+PS, SIMVp, SIMVp+PS, PS, PS-CMV, CPAP, nCPAP, HFM-CPAP, HFloNV, 2-level, 2-level+PS, APRV, APMV, PMLV, CFvS, SIGH, NIV, PS-VG, PC-VG, SIMV-VG, 2-level-VG, PMLV-VG, UVM

Backup system for the gas and power supply

- During failure of central gas supply, there is opportunity of backup system by medical compressor
- Mobile undercarriage for ease moving of the device and mounting of medical compressor
- Minimum of 3 hours for ventilation on internal battery, protection against power fluctuations

Higher ventilation options

- Non-invasive ventilation (NIV) is active for all ventilation modes and oxygen therapy
- The option of integrating mainstream and sidestream gas analysis method
- The option of ultrasonic or pneumatic nebulizer selection
- Functions such as simple Recruit manoeuvre and Weaning processing
- Function AutoStart represents system of ventilation start and recommendations of ventilation basic parameters; its key task is multi-level ventilation mode setting. This function allows very quick and nearly automatic setting of the device what is valuable in stress and critical situations
 - The option of multi-level ventilation of apnea patients (difficult ARDS, viral pneumonia, another non-homogenous lung spread)
 - High frequency modulated CPAC intended for patients under 5 kg
 - UVM represents computer-aided system with semi-automatic adjustment of parameters when patient is being disconnected from ventilator after operation
 - Mechanical parameters of lung of patients PAi, PAe, PEEPi, PEEP, PAmin, Cst, Cdyn, Paw, Risys, Resys, Tau_i, Tau_e, f, Ti%, VT, MV, Vd/Vt
 - Complex metabolic analysis of a patient, including energy consumption by organism – indirect calorimetry
 - Self-adaptive system expire AAE
 - Proportional control of minute ventilation APMV in all modes controlled by pressure
 - Compensation endotracheal tube
 - Graphic display of curves, loops, and trends
 - The option of patient identification card and export of the trends into PC with the option of its next adaptation
 - The option of connection to central information system by LAN interface



TECHNICAL PARAMETERS

· Power supply

- O2 supply pressure	2,8 kPax100 to 6 kPax100, 120l.min-1
- AIR supply pressure	2,8 kPax100 to 6 kPax100, 120l.min-1
- security class of the device	class I
- type of applied part	B
- feeding rated electric voltage	TN-S 110 - 240 V, 50/60 Hz
- own source of electric energy	12 V/ 8 Ah Pb
- running time on own resource at default parameters	more than 2 hours
- max. input	300VA device + accessories

· Ventilation parameters

- breathing volume Vt	for CMV from 4 to 2000 ml, for PCV from 2 ml 0,1 to 35 l.min-1 0 to 240 l.min-1 0 – 60 l.min-1 1 to 10 kPa 0,5 to 7 kPa – setting over PEEP 0 to 7 kPa – setting over PEEP 1 to 180 c.min-1
- minute ventilation MV	1 to 60 c.min-1, step 0,5 c.min-1
- inspiration flow Q	10% to 90% from Tc
- support inspiration flow Finsp	0 to 75% (recommended value from 10%)
- max. inspiration pressure pmax	6 s
- inspiration pressure at PCV ppc	1 : 299 to 9 : 1
- inspiration pressure at PS pps	0 to 5 kPa
- breathing frequency f	OFF, 20 to 100 l.min-1, step 10 l.min-1
- breathing frequency of mandatory breaths at SIMV fSIMV	21 to 100 %
- inspiration time Ti %	0 to 10 %
- inspiration pause Tp	0 to 10 %
- extension of insprium / inspiration hold	0 to 10 %
- time ratio	OFF, 10 to 100th adjustable up to 10
- PEEP	1,25 x Vt / 1,25 x ppc / 1,25 x pps
- ramp – angle of the start-up curve pressure/flow	1 to 20 c.min-1
- concentration of O2 in the inspiration flow	20 to 80% z Th-total time = 60/fpeeph
- concentration of CO2 in the inspiration/expiration flow	OFF, 0,5 to 2 kPa – pressure increase to the level PEEP
- deep breath	500 to 1000 c.min-1
- volume/pressure of the deep breath Sigh	OFF, 1 to 20 cmH2O
- frequency of the upper ventilation pressure level fpeeph	OFF, 1 to 30 l.min-1
- duration of upper pressure level PEEPH Tih %	0,5 to 20 l.min-1, OFF – adult
- upper pressure level PEEPH	0,1 to 20 l.min-1, OFF – pedi
- frequency of high frequency oscillation fhf	0,1 to 1,5 kPa, OFF
- amplitude of high frequency oscillation Phf	OFF, 20 to 70 % step 1%
- bias flow – basic flow	< 600 Pa at 60 l.min-1 (D-lite sensor)
- sensitivity of assistor - flow	< 600 Pa at 5 l.min-1 (Pedi-Lite sensor)
- pressure	1,2 l without humidifier
- Leakage	12 ml.kPa-1
- inspiratory and expiratory resistance	< 47 dBA in distance 1 m
- Internal volume of the complete breathing system	< 57 dBA
- Compliance	
- Medium level of acoustic pressure	
- Medium level of acoustic operation	



· Controlled and displayed parameters, alarm parameters

· Ventilation parameters

- alphanumeric evaluated parameters	Paw, Vt, MV, Pmin = PEEP, Pmean, %O2, %CO2, f, T/M
- graphically displayed data – pressure	pressure curve, P/V curve
- flow	flow curve, Q/V curve
- volume	volume curve, P/V curve, Q/V curve
- CO2	CO2 curve
- parameters of lung mechanics	PAi, PAe, PEEPi, PEEP, P Amin, Cst, Cdyn, Paw, Risys, Resys, Taui, Taue, f, Ti%, VT, MV

· Alarms

- technical alarms	supply pressure of O2, AIR, electric supply, failures in the system, mistakes during the test
- ventilation alarms – pressure	pmax, pmin, PEEPmax
- volume	MVmax, MVmin, Vtmin, Vtmax- O2
- inspiration concentration	FiO2min, FiO2max
- CO2	CO2min, max
- frequency	fmin
- level of acoustic alarm pressure	(55 to 75) dBA from 1 m

· Screen

- Display	15" TFT-LCD
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· Pneumatic nebulizer

- Supply pressure	400 kPa ± 50 kPa
- O2 consumption	3 l.min-1
- Aerosol quantity	20 ± 8 g.h-1

· Ultrasonic nebulizer

- Aerosol Output rate	0.24 ml/min
- Aerosol Output	1.08 ml emitted of 2.0 ml dose
- Residual Volume	< 0.1 ml for 3 ml dose

· Disposable filter

Filtration efficiency- Bacterial (%)	> 99,98
- Virus (%)	> 99,9
Respiratory space	60 ml
Pressure decrease	at 30 l.min-1 max. 40 Pa at 60 l.min-1 max. 80 Pa

· Dimensions, weight

- Width x depth x height	610 x 560 x 1100 mm, height with the control panel 1500 mm
- Design	table, stand
- Weight	65 kg ± 10%

Registered Trade Marks:

Chirana



Servoventilátor Chirana AURA basic concept is the solution kit modules. It is designed for long-term ventilation of small children to adults. It allows patients to ensure ventilation from minute ventilation 0.2l /min. Its ventilation parameters of controlled ventilation, through support to patients spontaneous respiration is one of the world's best. Built-in electronic ventilator works based on the use of 4-chamber membrane compressor.

It is completely adaptable to the patient. It offers a wide range of basic therapeutic options. It is more economical solution compared to a more sophisticated model of AURA.

AURA basic has an intuitive user interface that is the hallmark of most products CHIRANA company. Wide range of features allows the user to perform various configuration settings and device for monitoring of a patient's ventilation.

The advantage is the quality (we use EU components only), price and minimum use of consumables.



Ventilation modes:

- pressure-controlled assisted / SIMV-p / PCV, SPCV
- volume controlled assisted / SIMV-in / CMV, SCMV
- support PS, APRV (BIPAP), 2-Level + PS, CPAP, APMV (MVs)
- advanced features SIGH, Leakage
- Spontaneous CPAP
- apnoea ventilation is automatically embedded in each mode
- NIV Suitable for non-invasive pressure modes

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Registered Trade Marks:

Chirana-inox
Chirana



TECHNICAL DATA

Dimensions and weight

Dimensions
Model

440 x 390 x 450 mm, servoventilator on trolley 1350 mm
mobile
console - mounting ventilator unit to the console
35 kg servoventilator
64 kg servoventilator + trolley

Weight

Power supply

O₂ supply pressure central
Safety class and apparatus type
Mains voltage
Built-in power supply
Operation time with built-in power supply - default param.
Max. input
Mains sockets
Ventilation settings
Tidal volume V_t
Minute ventilation MV
Inspiration flow Q_{max}
Max.inspiration pressure p_{max}
Inspiration pressure at PCV p_{pc}
Inspiration pressure at PS p_{ps}
Frequency of breathing f
Frequency of breathing at SIMV/FSIMV
Inspiration time T_i %
Pause on the end of inspirium T_p
I : E ratio
Assistor sensitivity, flow
PEEP
Concentration O₂ in insp.flow
SIGH
Bias flow - base flow
Leakage
Intelligent expirée
Automatic oxygenation and manual preoxygenation

3 kPa x 100 up to 6 kPa x 100, 120l.min⁻¹
class I, B
TN-S110 - 240 V, 50/60 Hz
12V/10 Ah Pb
more than 2 hours
300 VA apparatus + accessories
2 x max. summary take-off 2 A

in PCV from 10 ml, in CMV from 20 ml to 2000 ml
0.2 to 35 l.min⁻¹
3 to 90 l.min⁻¹
1 to 10 kPa
0.5 to 7 kPa adjusting over PEEP
0 to 6 kPa adjusting over PEEP
4 to 80 bpm
1 to 20 bpm
20 % to 80 % from T_c
0 to 50 % (recommended real value from 10 %)
1:4 to 4:1
1 to 20 l.min⁻¹, OFF
0 to 25 Pa x 100
21 to 100 %
OFF, 10th to 100th (1.25 x V_t, 1.25 x p_{pc}, 1.25 x p_{ps})
0 to 30 l.min⁻¹
OFF, 20 to 70 %
reaction to extreme situation, e.g. patient cough
oxygenation of the patient by 100 % O₂ before
disconnecting from the ventilator or on reconnection to
the ventilator
OFF, 50 and 100 % relation to diemension of ET
cannula

Tubus compensation

Controlled and displayed parameters, alarm parameters

Alphanumerically evaluated parameters:

Pressure - paw , Volume V_t, minute ventilation MV, minimal pressure p_{min}= PEEP, medium pressure, concentration insp. O₂, frequency f, T/M effort of the patient

Graphically displayed data:

- pressure pressure curve, P/V curve
- flow flow curve, Q/V curve
- volume volume curve, P/V curve, Q/V curve

Pulmonary mechanics parameters

Response time - inspirium, expirium, peak alveolar pressure, end-expiratory alveolar pressure, inadvertent PEEP_i, static lung compliance, dynamic lung compliance, inspiratory airway and ventilation system resistance

Technical alarms

Supply O₂, Trouble in system, Mistakes during test
supply pressure O₂, power supply,

Alarm parameters

- pressure P_{max}, P_{min}
- volume MV_{max}, MV_{min}, V_{tmin}
- O₂ inspir. concentration FiO_{2min}, FiO_{2max}
- frequency f_{min}

Monitor

Display 12,1" TFT-LCD

Humidis

VADI 1500 - standard, or VADI 3000 with feedback and respiratory hoses heating

Nebulize

Supply pressure 400 kPa ± 50 kPa
O₂ consumption 3 l.min⁻¹
Volume of aerosol 20 ± 8 g.h⁻¹

შეთავაზება



N	დასახელება	განზ. ერთ	რ-ობა	მომწოდებელი	ქვეყანა	მოდელი	ერთ. ღირ	საერთო ფასი
	ხელოვნური სუნთქვის აპარატი	ცალი	1	Chirana	სლოვაკეთი	Aura V	€ 16,000.00	€ 16,000.00
	ხელოვნური სუნთქვის აპარატი	ცალი	1	Chirana	სლოვაკეთი	Aura Basic(მეორადი)	€ 5,000.00	€ 5,000.00
	ხელოვნური სუნთქვის აპარატი	ცალი	1	Chirana	სლოვაკეთი	Aura Basic	€ 10,000.00	€ 10,000.00
								€ 31,000.00

შპს უნიმედი