ARIA 150 C

A next generation of high-end ICU ventilators powered
with artificial intelligence.

siare
E N G I N E E R I N G
INTERNATIONAL GROUP

Introducing ARIA 150 C with integrated modern features never before,

- High resolution 15" TFT touch GUI (Graphical User Interface) for better visibility;
- High performance built in dual air blower (patient flow & cooling);
- Capable to ventilate all the patient range acute and subacute from adults to neonates;
- Invasive and NIV for entire patient range from adults to neonates (TV 2ml-3000ml);
- Integrated patented flow sensor technology based on electromagnetism principle;
- Long life, reusable and ultra-sensitive single flow senor for all neonates, pediatric and adults;
- Lung status for patient monitoring & management of secretions;
- High peak flow for better performance & leak compensation;
- Lung protective ventilation mode (APCV-TV);
- Auto weaning mode (PSV-TV) for all patient range;
- Advanced lung mechanics monitoring parameters;
- HFNC mode available for pediatric and adult patients;
- NIV mode available for all patient type and conditions (controlled to spontaneous breathing);
- 15 different ventilation modes, better than all contemporary ventilators;
- Upgradable to capnography and oxygen saturation measurement;
- Dual mode like APRV available;
- Wide range of input and monitoring parameters;
- Inbuilt pneumatic nebulizer;
- Integrated with high and low oxygen port;
- 2 USB ports;
- Available with car charger;
- Available with HL7 connectivity;
- 4 hour of battery backup;
- Additional PRP monitoring.
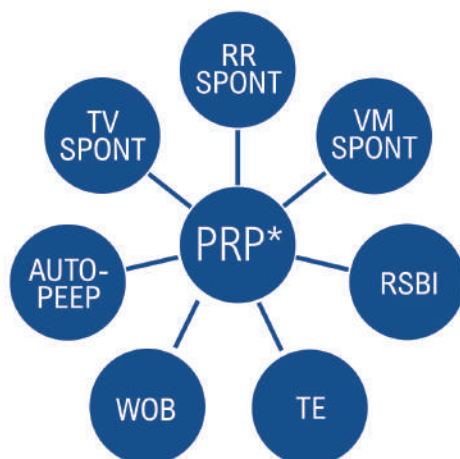
PRP* (Physiological respiratory parameters)

- RR spont: spontaneous breathing rate;
- TV spont: spontaneous tidal volume;
- MV spont: spontaneous minute volume;
- RSBI: rapid shallow breathing index;
- TE: expiratory time constant;
- WOB: work of breathing;
- AUTOPEEP: Intrinsic PEEP.

ARIA 150 C offer various high end ventilatory modes for different treatment scenarios. With its ease of use GUI it is very easy for clinician to switch between these modes, with no requirement of additional device. This ensures the continuity of care and enhance the ease of operation. Some of the modes offered are:

- Controlled volume VC/VAC;
- Controlled volume for newborns and premature VC/VAC BABY;
- Controlled pressure APCV;
- Guaranteed tidal volume in controlled pressure synchronized with patient breath APCV-TV;
- Synchronized intermittent mandatory ventilation by pressure P-SIMV + PS, V-SIMV +PS;
- Assisted pressure PSV with apnea back-up;
- Assisted ventilation with pressure support with guaranteed tidal volume with apnea back-up PSV-TV;
- HFNC High flow nasal cannula, Non-invasive ventilation with delivery of high O_2 flows (21% -100%);
- Non invasive ventilation NIV with leaks compensation -BILEVEL, CPAP, APRV, adjustable drug nebulizer;
- Pressure and inspiratory flow trigger with adjustable sensitivity;
- Graphic and table trend of data;
- Visualization of all patient data by wide dimensions curves (5 contemporaneously} and alphanumerical values;
- Expiratory valve and flow sensor group easily interchangeable to facilitate the sterilization;
- Predisposition for inspired and expired CO_2.

ARIA 150 C one device solution for long term ICU Ventilation and Transportation offers several benefits like:

Modular design
ARIA 150 C can be used in acute and subacute area and is easily transportable thanks to its modular trolley. Device can be mounted on the bed side with shelf mount or device can be place on the pendant system depend upon the user's choice.

Effective Weaning Protocols
PSV-TV acts as an auto weaning mode in which deliver (Volume Targeted) pressure support ventilation with guaranteed current volume and guaranteed safety respiratory rate set by the Operator (Apnea Back Up). The system displays all PRP relative to the set operative mode. PSV-TV can be used on active patient to sustain spontaneous ventilation for patients with stabilized ventilation needs or who are in weaning phase. If the patient does not trigger the system will automatically provide an APCV-TV ventilation with set safety respiratory rate (RR backup) and I:E ratio (I:E backup).

Based on patented electromagnetic long life flow sensor
Flow sensor associated with the Siare ICU Ventilators are reliable, accurate and offer the best solutions in flow sensor technology which is based on the principle of electromagnetism. These flow sensors are not affectable by humidity and are easy chemically disinfectable. This micro flow sensor measures the gas volume, from 2 to 3000 ml.

Thanks to the flow sensor technology, clinician need not to change the flow sensor for different patient group as same flow sensor works for Adult to neonates patients, hence enhancing the patient safety, ease of use besides offering a cost effective care.

Connectivity
ARIA 150 C is upgradable to HL7 (Health Level Seven International). HL7 act as a bridge between the modern healthcare services and advancing information technology.

Respiratory monitoring center
Siare has introduced first of its kind Central stations for connecting its ICU Ventilators. It allows to connect all the ventilators and remotely control the trend of curves, parameters, and alarms, always in complete safety and user can add beds at any time, in order to display ventilator parameters.

Unique features and options of ARIA 150 C

Adult, pediatric and neonatal ventilation are available, thanks to an adjustable minimum tidal Volume from 2 ml to 3000 ml.

Integrated pneumatic nebulizer. Aerogen nebulizer can be integrated as optional.

The lung ventilator is equipped with a flow and pressure trigger, also it includes the most modern ventilation modes.
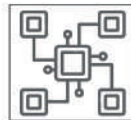
Pulse oximetry (SpO2 and pulse measurement).

High performance Non-Invasive Ventilation (NIV APCV - NIV PSV) modes.

Mainstream and side stream capnography.

Upgradable to transpulmonary pressure measurement which allows optimization of PEEP, tidal volume, and inspiratory pressure.

LAN, RS232 and HL7 connectivity.

HFNC: High flow nasal cannula (optional) Non-invasive ventilation with delivery of high O_2 flows (21% -100%). Flow: adult patients: from 10 L to 60 L - paediatric patients: from 10 L to 25 L.

15 inch TFT display touchscreen

The lung status icon simulates the patient's lungs, graphically displaying the respiratory cycle by alternatively switching the lungs colour which offer clear visibility and situation awareness to the intensivist.
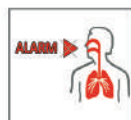
During inspiration the lungs icon turns green.

During triggering or at spontaneous breath the icon turns yellow.
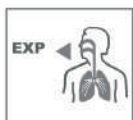
During expiration the lungs icon turns light grey.

During the low airways pressure the lungs icon turns red.

Since more than 45 years Siare Engineering International Group is committed in developing the respiratory solutions helping intensivist and anethesitis to provide highest quality of care while ensuring patient safety and great clinical outcome. The constant and meticulous scientific research and the continuous use of increasingly cutting-edge technologies, allow us to create products of the highest quality of care and enhancing the ease of use. Our team of passionate professionals are committed to develop the innovative in the field of ventilation and anesthesia which is been trusted by our global users worldwide since 1974.

DATA FOR ORDERING
Item code 960502/P - Aria 150 C

Which includes:
- User's Manual
- Double hose patient circuit
- Antibacterial filter for the patient circuit
- Nebulizer set
- Power cable
- Air Filter for Turbine
- Expiratory valve with Flow sensor
- O$_2$ supply hose
- O$_2$ cell