SR 500
POWERED AIR-PURIFYING RESPIRATOR

Features

- Lightweight, balanced and ergonomic design
- Ergonomic comfort belt
- High air flow rates
- Easy to adjust and maintain
- Automatic setting of flow rates
- Triple warning system - audible, visual and sensory (vibration)
- Superior lithium-ion battery technology
- Simple filter/cartridge system
- Loose-Fitting Hoods
  Loose-Fitting Respirator
  Tight-Fitting Face Piece
The **SR 500** system is a belt mounted Powered Air-Purifying Respirator (PAPR) with tight fitting face pieces, loose fitting respirators or loose fitting hoods that protects against particulates, gases and vapors, or a combination.

It is designed to be used in oxygen sufficient and non-immediately dangerous to life and health (IDLH) environments. The SR 500 PAPR system functions as an alternative to Air Purifying Respirators (APR) in all situations for which these are recommended. This applies particularly to work that is hard, warm or of long-duration. The filtered air is supplied through a breathing hose to the tight fitting face piece, loose fitting respirator or loose fitting hoods. The above-atmospheric pressure then generated prevents surrounding pollutants from penetrating into the breathing zone.

Typical applications includes agriculture, asbestos, mold and lead paint abatement, construction & building renovation, demolition, chemical industry, food & beverage processing, lead battery plants, medical & health care, metal work, pharmaceutical manufacturing, power plants, pulp & paper processing, recycling plants, smelting and foundries, surface preparation, painting, coating, and more.

Customer driven product development and incorporation of the latest technologies generates a unique design and superior features of the SR 500 PAPR series.

**Features**
- The fan unit is lightweight, balanced with a superior ergonomic design.
- Unique design of the belt, keeps the fan unit comfortable and stable.
- High flow rates, normal operation mode 6 CFM / 175 lpm and boosted operation mode 8 CFM / 225 lpm.
- A fully automatic setting of flow rates without any needs for calibration, independent of filter/cartridges or head top used.
- The power switch is conveniently located and easy to reach. Strategically placed to prevent accidental deactivation.
- The fan unit offers audible, visual, vibration alarm for obstruction of air flow, clogging of filters or low battery for the safety of the worker.
- The fan unit can be used with HE particulate filters only or with a filter combination with chemical cartridges.

**Battery and charger design**
- On board Lithium-ion battery, designed for easy removal and replacement.
- Charging time 80 % - 70 min, 100 % - 3 h.

**Battery charger, 3-stage:**
- Boosted charging charges the battery to about 80 % of its capacity.
- Balanced charging charges the battery to 100 % of its capacity.
- Trickle charging, fully charged battery.
- Gang chargers are available.

**Accessories**
- Leather belt SR 503 for casting, flame cutting and other similar operations, extra long leather belt SR 503 L.
- Rubber belt SR 504 for decontamination, casting, flame cutting and other hot working situations.
- Splash cover SR 514 protects the fan unit from dust, particulates, splash and liquids.
- Battery gang charger SR 506, for five chargers.
- Battery gang charger SR 516, including five chargers.
- Practical grip bag with two separate major compartments. Space for the SR 500 powered unit, accessories and chosen face-piece.
Loose-Fitting Hood SR 520
A lightweight hood which covers the face and head. Easily adjustable headband suspension. Available in two sizes S/M and M/L. Visor of chemical-resistant CA. 1,000 APF (Assigned Protection Factor) documented in third party studies, according to OSHA 3352-02 2009.

Accessories:
- Protective film SR 522 for the visor.

Loose-Fitting Hood SR 530
A lightweight hood which covers the face, head, neck and shoulders. Easily adjustable headband suspension and neck seal, providing high protection including people with beards. One size fits all face shapes. Visor of chemical-resistant CA. 1,000 APF (Assigned Protection Factor) documented in third party studies, according to OSHA 3352-02 2009.

Accessories:
- Protective film SR 522 for the visor.

Loose-Fitting Hood SR 520
A lightweight hood which covers the face and head. Easily adjustable headband suspension. Available in two sizes S/M and M/L. Visor of chemical-resistant CA. 1,000 APF (Assigned Protection Factor) documented in third party studies, according to OSHA 3352-02 2009.

Accessories:
- Protective film SR 522 for the visor.

Tight-Fitting Face piece SR 200
Breathing hose SR 550 in PUR or SR 551 in rubber connects the SR 500 PAPR to the SR 200 full face mask. 1,000 APF (Assigned Protection Factor) according to OSHA 3352-02 2009.

Accessories:
- Laminated glass visor SR 365.
- Spectacle frame kit SR 341 for prescription lenses.
- Welding shield SR 84.
- Protective film SR 343 for the PC visor.
- Protective film SR 353 for the laminated glass visor.
- Rubber head harness SR 340.

SR 540, SR 530 and SR 520 are all delivered with breathing hose for connection to the SR 500 PAPR.
SR 500 Filters/Cartridges

The filters and cartridges are dimensioned to handle the high air-flow rates provided by the PAPR.

The SR 510 P100 / HE and SR 710 HE particulate filters are both of mechanical type and protects against all types of particles (dust, fume, fog, spray, asbestos), as well as bacteria, viruses and radioactive dust. The filter efficiency is >99.997 % meaning that the air is 33,000 times cleaner on the backside of the filter media than in the front. The active filter area is 201 square inches (1300 cm²) which generates an extended usage time. The SR 510 can also be used with all Sundström Air Purifying Respirators.

The SR 532 OV/SD/CL/HC/HF chemical cartridge protects against organic gases and vapors, e.g. solvents, with a boiling point of more than +65 °C. It protects against acidic gases and vapors, such as sulphur dioxide, chlorine, hydrogen chloride and hydrogen fluoride.

The SR 533 CL/HC/SD/FM/AM/MA chemical cartridge protects against acidic gases and vapors, such as chlorine, hydrogen chloride, sulfur dioxide and formaldehyde. It also protects against ammonia, methylamine and certain amines.

Note that each cartridge shall be combined with a particulate filter to prolong the lifetime of the fan unit.

Operating times

The operating times may vary with different temperatures, conditions of filters and the condition of the battery. The table below gives the expected operating times under ideal conditions.

<table>
<thead>
<tr>
<th>Battery 3,6Ah</th>
<th>Filter / Cartridge</th>
<th>Air flow rate</th>
<th>Expected operating time</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>SR 510 or SR 710</td>
<td>6 CFM / 175 lpm</td>
<td>13 hours</td>
</tr>
<tr>
<td>X</td>
<td>SR 510 or SR 710</td>
<td>8 CFM / 225 lpm</td>
<td>8 hours</td>
</tr>
<tr>
<td>X</td>
<td>SR 510 + SR 532</td>
<td>6 CFM / 175 lpm</td>
<td>8,5 hours</td>
</tr>
<tr>
<td>X</td>
<td>SR 510 + SR 532</td>
<td>8 CFM / 225 lpm</td>
<td>5 hours</td>
</tr>
<tr>
<td>X</td>
<td>SR 510 + SR 533</td>
<td>6 CFM / 175 lpm</td>
<td>8,5 hours</td>
</tr>
<tr>
<td>X</td>
<td>SR 510 + SR 533</td>
<td>8 CFM / 225 lpm</td>
<td>5 hours</td>
</tr>
</tbody>
</table>

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AFC International Inc • PO Box 894 • DeMotte, IN 46310
800.952.3293 • 219.987.6825 • fax 219.987.6826
www.afcintl.com • sales@afcintl.com