

# RESPIRATORY CATALOG

ANOR

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AirPlus® PAPR Series



REV. 2 2020

# AIRPLUS<sup>®</sup> POWERED AIR SYSTEM

Welding creates fumes. Depending on the ventilation in the work setting, a powered air system is the prudent approach to worker safety. The AirPlus® Powered Air System is the third generation development from the ArcOne® 20-year PAPR program.

ArcOne's AirPlus<sup>®</sup> Powered Air-Purifying Respirator (PAPR) System is a motorized, battery operated system that blows a constant supply of fresh, filtered air over the face. It creates a positive pressure inside the respirator head top, keeping out harmful welding fumes and particulates.



### **Features**

- 8-Setting airflow control, minimum flow at 170 LPM
- Constant airflow correction technology
- · Visual and audible alarms for low battery voltage
- 14-hour Lithium-Ion battery (at minimum fan speed) charges in 6 hours
- Audible and vibration alarms for low flow (clogged filter) and missing filter
- Ergonomic comfortable belt
- Flexible breathing tube with quick disconnect with fire retardant air-hose cover
- NIOSH 42 CFR Part 84 Approval Number: TC-21C-0947

# **System Specifications**

#### **BLOWER UNIT**

Type Flow Control
Motor Speed 6,000-10,000 RPM
Motor Brush-less
Air Supply Minimum of 6 Cubic Feet
(170 liters/minute)
Case Impact-proof ABS
Filter Cartridge Single plug-in type
Hose Length
Hose Diameter (Internal) 1.1 in / 28 mm
Hose Connection Quick Disconnect
Weight 1.4 lbs / 0.63 kg
Dimensions
Color Black and Blue

#### BATTERY

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Operating	Time	14 hours at minimum fan speed
Charging 1	īme	6 hours
Charging (	Cycles	350 (under ideal conditions)
Housing .		Impact-proof ABS
Weight		0.78 lb / 0.35 kg
Dimensior	ıs	5.9 x 2.9 x 1.65 in, 150 x 74 x 42 mm
Color		Black

#### CHARGER

Туре	DC Rectifier
Primary Voltage	120 V / 60 Hz
Secondary Voltage	
Output Current	DC 8.4 V, 1500 mA
Weight	0.24 lb / 0.110 kg
Dimensions	3.3 x 2.6 x 1.7 in, 84 x 66 x 43 mm
Color	Black
Approvals	CE and FCC

# AIRPLUS® SYSTEMS

PART #	DESCRIPTION
AP-1	AirPlus® Powered Air Purifying System includes Battery, Battery Charger, Waist Belt, Flame
AP-I	Retardant Tube & Hose Cover, Air Flow Indicator, Powered Respirator with HEPA filter & duffle bag.

# **AIRPLUS® PARTS AND ACCESSORIES**

PART #	DESCRIPTION	
AP-BAT-02	AirPlus <sup>®</sup> Battery	
AP-BLW-02	AirPlus <sup>®</sup> Blower Unit (includes one P3 Filter)	
AP-CHG-01	AirPlus <sup>®</sup> Battery Charger	
AP-BT-01	AirPlus <sup>®</sup> Breathing Tube without FR Cover	
AP-BT-02	AirPlus <sup>®</sup> Long Breathing Tube without FR Cover	
AP-BTC-01	AirPlus <sup>®</sup> Breathing Tube with FR Cover	
AP-BTC-02	AirPlus <sup>®</sup> Long Breathing Tube with FR Cover	
AP-BT-FR	AirPlus <sup>®</sup> Flame Retardant Hose Cover	
AP-BT2-FR	AirPlus® Flame Retardant Hose Cover with extra length	
AP-FIL-03-4	AirPlus® HEPA Filter (4-Pack)	
AP-FIL-03-12	AirPlus® HEPA Filter (12-Pack)	
AP-WBT-01	AirPlus® Waist Belt (34.5")	
AP-WBT-EXT	AirPlus <sup>®</sup> Waist Belt Extension (10")	
AP-AFI-01 🛕	AirPlus® Air Flow Indicator	
CA-CAC-02	Duffle bag	



There are two head top options that pair with your AirPlus® PAPR System.



Vision®

**AirShield**<sup>®</sup>

### **AIRPLUS® HEAD TOP SELECTION**

# AIRPLUS® VISION®

The AirPlus® PAPR System's most popular head top is the modern designed Vision® welding helmet. The Vision® helmet series comes in black and other decaled designs, and is a lightweight, full-coverage helmet. It has a sleek look and is great for tight spaces where wider helmets can't fit. The Vision® is Z87+ rated.



### **Features**

- Available with a range of Auto-Darkening lenses, with viewing areas up to 17 square inches
- Lightweight nylon helmet 1.23 lbs / .56 kg
- Super comfortable FR treated face shield
- Black and decal welding helmet designs
- Order with AP-1
- Meets / Exceeds ANSI Z87+, CAN/CSA Z94.3
- NIOSH approved

PART #	DESCRIPTION	
AP-AIRDUCT-01	AirPlus <sup>®</sup> Airduct - includes headgear	
AP-SWB-01	AirPlus <sup>®</sup> Sweatband (2-Pack)	
AP-HG-K	AirPlus® Headgear Kit (Knobs, Screws, Pivot Stop)	
AP-BT-01	AirPlus <sup>®</sup> Breathing Tube without FR Cover	
AP-BTC-01	AirPlus <sup>®</sup> Breathing Tube with FR Cover	
AP-BT-FR	AirPlus <sup>®</sup> Flame Retardant Hose Cover	
02-OP	Outside Cover Plate	
AP-HFS-01	AirPlus <sup>®</sup> Face Seal	

# PICK A VISION<sup>®</sup> HEAD TOP TO GO WITH BFFVX, IDF81, X81VX, X54V, X54VI LENS & AP-1 (X=LENS)



# AIRPLUS<sup>®</sup> WITH AIRSHIELD<sup>®</sup>

ArcOne's new full-coverage grinding visor exceeds expectations with its durable construction, large viewing area, sturdy headgear, quick and easy visor installation and removal, all at an economical price-point.



## Features

- Large shield-like viewing area Visor dimension: 7" x 5.4" x 0.040" Viewing area: 41.2 sq. in. (176.9 mm x 137.7 mm x 1.0 mm, Viewing area: 26560 mm<sup>2</sup>) The visor is 0.067" thick
- Complete with comfortable sweatband
- Shell is 0.28 lbs (130 grams);
   Visor is 0.12 lbs (55 grams);
   Complete 0.58 lbs (265 grams)
- Direct flow into the helmet with new air-manifold system
- User control of airflow direction
  - » Fully open air setting to mitigate fogging
  - » Fully closed air setting to channel airflow to breathing zone
  - » Partially closed air setting for taking the sweat out of welding
- Lightweight, super comfortable 100% cotton, FR treated face seal
- Easy change face seal, no more nuts and bolts to fiddle around with
- Order with AP-1
- Meets/Exceeds: ANSI Z87+, CAN/CSA Z94.3, CE EN 166
- NIOSH and CE approved

PART #	DESCRIPTION
AP-AR-SH 🛕	Respiratory AirShield®
AP-HFS-02 \Lambda	Face Seal for Eagle $^{\ensuremath{\scriptscriptstyle \otimes}}$ and AirShield $^{\ensuremath{\scriptscriptstyle \otimes}}$
AP-BT-01	AirPlus <sup>®</sup> Breathing Tube without FR Cover
AP-BTC-01	AirPlus <sup>®</sup> Breathing Tube with FR Cover
AP-BT-FR	AirPlus® Flame Retardant Hose Cover
AIR-WHA-10	Adapter to attach AirShield <sup>®</sup> to an ArcOne <sup>®</sup> welding helmet
AIR-CL <u>/</u>	AirShield <sup>®</sup> Clear Replacement Visors (2-Pack)





# AIRPLUS® PAPR KITS

ArcOne<sup>®</sup> is now offering three kit options for the AirPlus<sup>®</sup> PAPR System at a lower price than buying a head top and blower separately.

# AP1K-V-BFFVX

#### AirPlus<sup>®</sup> PAPR Kit with Vision<sup>®</sup> BFFVX

Black Respiratory Vision<sup>®</sup> Auto-Darkening Welding Helmet with BFF<sup>®</sup> Lens, AirPlus<sup>®</sup> Battery, Battery Charger, Waist Belt, Flexible Breathing Tube with FR Cover, Airflow Indicator, Powered Respirator with HEPA filter & duffle bag.

#### **BFFVX Lens Specifications:**

- 17 Square Inch Viewing Area
- Light State: 3, Dark State: 5-13
- Grind Mode
- 2 Optical Sensors, 1 Magnetic Sensor



### AP1K-V-X81VX

#### AirPlus<sup>®</sup> PAPR Kit with Vision<sup>®</sup> X81VX

Black Respiratory Vision<sup>®</sup> Auto-Darkening Welding Helmet with X81VX Lens, AirPlus<sup>®</sup> Battery, Battery Charger, Waist Belt, Flexible Breathing Tube with FR Cover, Airflow Indicator, Powered Respirator with HEPA filter & duffle bag.

#### X81VX Lens Specifications:

- 12.6 Square Inch Viewing Area
- Light State: 3, Dark State: 5-14
- Grind Mode
- 4 Optical Sensors, 1 Magnectic



## **AP1K-AIRSH**

#### AirPlus<sup>®</sup> PAPR Kit with AirShield<sup>®</sup>

Respiratory AirShield® Grinding Visor, AirPlus® Battery, Battery Charger, Waist Belt, Flexible Breathing Tube with FR Cover, Airflow Indicator, Powered Respirator with HEPA filter & duffle bag.



# **SR POWERED AIR-PURIFYING RESPIRATOR**

# Customer driven product development and incorporation of the latest technologies has generated the unique design and superior features of the SR 500 PAPR series.

The SR 500 system is a Powered Air-Purifying Respirator (PAPR) that protects against particulates, gases and vapors, or a combination of both. It is designed to be used in oxygen sufficient and non-immediately dangerous to life and health environments. The filtered air is supplied through a breathing hose to the tight fitting face piece and loose fitting head gear. The above-atmospheric pressure generated prevents surrounding pollutants from penetrating into the breathing zone.

### Features

- High flow rates, normal operation mode 175 LPM and boosted operation mode 225 LPM
- On board lithium-ion battery designed for easy replacement
- Charging time 80%-70 min, 100%-3 hrs. 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.
- Unique design of the belt keeps the fan unit comfortable and stable
- Easily removable parts allow simple cleaning, maintenance and replacement
- Equipped with automatic flow control securing the delivery of the preset flow rate
- The fan unit can be used with particulate filters or a combination of particulate filters and chemical cartridges

TYPICAL SR500 APPLICATIONS include agriculture, asbestos, mold & lead paint abatement, construction & building renovation, demolition, chemical industry, food & beverage processing, lead battery plants, medical & health care, metal work, welding shops, pharmaceutical manufacturing, power plants, pulp & paper processing, recycling plants, smelting & foundries, surface preparation, painting, coating, and more.



- Lightweight, balanced and ergonomic design
- Dual flow rates
- Easy to adjust and maintain
- Automatic setting of flow rate and flow control
- Triple warning system; audible, visual and sensory (vibration)
- Superior long lasting lithium-ion battery technology
- Simple filter/cartridge system
- Loose Fitting Headgear, Hoods, Face Shield, Hard Hat, Hard Hat with Welding Face Shield

# SR HEAD TOPS

Choose a suitable face piece to go with your SR System. All face pieces are supplied with a breathing hose for connection to fan SR 500.



#### SR 530 H06-0421 - Loose Fitting Hood

A lightweight hood which covers the face, head, neck and shoulders. Great for sanding and painting and easy to clean. Easily adjustable headband suspension and neck seal providing high protection including for people with beards. One size fits all face shapes and sizes. Provides respiratory protection with an at APF of 1,000 (Assigned Protection Factor) according to OSHA 3352-02 2009.

TO ORDER IN A KIT, USE PART #: H06-0921-K A SR 500/530 Kit, Hooded Top with SR 500 & duffle bag



### SR 540

### H06-0521 - Grinding Visor Face Shield

A unique face shield with an excellent field of vision, great for painting and grinding. The visor can easily be flipped up to a good balanced "over the head" position. Visor is made of scratch resistant PC that can easily be replaced. Provides respiratory protection with an APF of 25 (Assigned Protection Factor) according to OSHA 3352-02 2009. Limited eye protection (ANSI Z87.1-2010).

### TO ORDER IN A KIT, USE PART #: H06-0721K 🛆 SR 500/540 Kit, Grinding Visor with SR 500 & duffle bag



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# SR 570

### H06-6521 - Grinding Visor Face Shield

A new face shield in the SR 500 series. It features a flip-up visor made of scratch resistant PC that can be easily replaced. Visor flips up to an over the over head position while maintaining good balance. It is ideal for painting and grinding. Provides respiratory protection with an APF of 25 (Assigned Protection Rating) according to OSHA 3352-02-2009. Limited eye protection (ANSI Z87.7-2010). Also features attachments for adding hearing protection, and a bump cap for protection against impact. Use part number H06-6721 to include bump cap.

TO ORDER IN A KIT, USE PART #: H06-6621-K SR 500/570 Kit, Grinding Visor with bump cap with SR 500 & duffle bag



### SR 580

### H06-8021 - Hard Hat with Visor

Provides complete respiratory, face and head protection and can be combined with most earmuffs. The scratch resistant PC visor is easy to replace and offers a wide field of vision. The visor can be flipped up to a good balanced "over the head" position. Provides respiratory protection with an APF of 1,000 (Assigned Protection Factor) according to OSHA 3352-02 2009. Provides limited eye protection (ANSI Z87.1-2010). Provides limited head protection (ANSI Z89.1-2009 Type 1 Class G).

TO ORDER IN A KIT, USE PART #: H06-8121-K A SR 500/580 Kit, HH/Grinding Visor with SR 500 & duffle bag



# SR 580 & SR 584 🔺

### H06-8321 Hard Hat with Visor and Welding Face Shield

Provides complete respiratory, face and head protection and can be combined with most earmuffs. The welding face shield can be flipped up and offers not only a wide field of vision but face protection during grinding and other types of work. Provides respiratory protection with an APF of 1,000 (Assigned Protection Factor), according to OSHA 3352-02 2009. Provides limited eye protection (ANSI Z87.1-2010). Provides limited head protection (ANSI Z89.1-2009 Type 1 Class G). Comes with passive shade 10 plate - other ADF lenses available (5500V or 7500VX).

TO ORDER IN A KIT, USE PART #: 7500VX-H06-8421 A HH/Welding Helmet w/ SR 500 PAPR, 7500VX lens & duffle bag

OR PART #: 5500V-H06-8421 ▲ HH/Welding Helmet w/ SR 500 PAPR, 5500V lens & duffle bag

OR PART #: PS10-H06-8421 🛕 HH/Welding Helmet w/ SR 500 PAPR, Passive Filter & duffle bag

# **SR 500 FILTERS AND CARTRIDGES**

### Filters and cartridges are designed to handle the high air-flow rates provided by the PAPR.



#### H02-1321

This particulate filter is mechanical 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 after the air has passed the filter. The active filter area is 201 square inches, which generates an extended usage time. This is almost 3 times bigger than competitors active filter area.

#### H02-7121 - OV/SD/CL/HC/HF Chemical Cartridge

The 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 sulfur dioxide, chlorine, hydrogen chloride and hydrogen fluoride.

#### H02-7221 - CL/HC/SD/FM/AM/MA Chemical Cartridge

This 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 chemical cartridge must be combined with a particulate filter to prolong the lifetime of the fan unit.



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# **SR PARTS AND ACCESSORIES**

### The SR Series has many accessories that can be used in many different working situations.

PART #	DESCRIPTION	PART #	DESCRIPTION
SR 500		SR 570	
H06-0121	SR 500 PAPR Blower with Battery, Battery Charger, Waist belt and Air Hose	H06-6521	Grinding Visor face shield only (includes hose)
T06-0101	SR 500 HD Battery	H06-6721	Grinding Visor face shield with bump cap only (includes hose)
R06-0122	SR 500 Battery Charger	R06-0602	Sweatband for SR 570
R06-0127	Battery Clip	T06-0611	Face seal for SR 570 (Flame Retardant)
H02-1321-5	HEPA Particulate (5-Pack)	R06-0635	Breathing hose for SR 570
H02-1321-20	HEPA Particulate (20-Pack)	R06-0667	Visor set PC for SR 570
H02-7121-5	OV/SD/CL/HC/HF Chemical Cartridge (5-Pack)	T06-0601-10	Protective film for visor on SR 570 (10-Pack)
H02-7121-20	OV/SD/CL/HC/HF Chemical	T06-0602	Bump cap for SR 570
	Cartridge (20-Pack)	T06-0610	Neck cover for SR 570 (Flame Retardant)
H02-7221-5	CL/HC/SD/FM/AM/MA Chemical Cartridge (5-Pack)	SR 580	
H02-7221-20	CL/HC/SD/FM/AM/MA Chemical Cartridge (20-Pack)	H06-8021	Hard Hat with Visor
T06-0104	Standard Belt (Rubber)	R06-0810	Breathing Hose for SR 580
T06-0103	Standard Belt (Leather)	R06-0808	Spare PC Visor for SR 580
T06-0107	Large Belt (Leather)	T06-0801-10	Protective Film for SR 580 (10-Pack)
R06-0101	Standard Belt (Polyester)	T06-0801-100	Protective Film for SR 580 (100-Pack)
T06-0116	Harness for SR 500	T06-0803	Neck Comfort Band
SR 530		R06-0805	Face Seal for SR 580
SK 550		T06-4016	Welders Protective hose cover (Proban)
H06-0421	Loose fitting hood	T06-8011	Welding Protection for neck & chest (Proban)
R06-0203	Sweatband for SR 530	R06-0809	Hard Hat Sweatband for SR 580
T06-0121-20	Hose Protection (Plastic) (20-Pack)		
T06-0201-144	Protective Film for SR 530 (144-Pack)	SR 584	
T06-0806	Protective Hood for SR 530/540/580 (Tyvek)	H06-8321	Hard Hat with Visor and Welding Face Shield
SR 540		T06-0808	
		T06-0809	Welding Protection for neck & chest (Leather) Face Seal Welding Protection (Leather)
H06-0521	Grinding Visor Face Shield only	T06-8012	Face Seal Welding Protection (Leather)
R06-0501	Breathing Hose for SR 540	5500V	Lens Option to use with SR 584
R06-0507USA T06-0501-12	Spare PC Visor for SR 540 Protective Film for SR 540 (12-Pack)	7500VX	Lens Option to use with SR 584
T06-0501-12	Protective Film for SR 540 (12-Pack) Protective Film for SR 540 (144-Pack)	03-OP	
R06-0504	Sweatband for SR 540	05-02	Inside Cover Plate for 5500V Lens when using with SR 584
T06-0504	Face Seal for SR 540	10-IP-5	Inside Cover Plate for 7500VX Lens when
T06-0505	Head Cover		using with SR 584 (5-Pack)
		04-OP	Outside Cover Plate for 5500V & 7500VX Lenses when using with SR 584



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