

 **e-breathe**

SMARTBLOWER

Respiratory Protection System



 English

Smartblower System

Respirator

The small and lightweight Smartblower respiratory protection system offers maximum flexibility and safety. The system has a modular construction and consists of a Battery/Control Unit (SVE), a connecting cable and the blower unit. The system can be extended according to specific requirements. The unit is suitable for pressurised applications and supplies the connected head piece with filtered breathing air. The blower is controlled by a 350g Battery/Control Unit and delivers an air volume from 140l/min up to 160l/min. The Smartblower System features a wide range of practical functions:

Automatic airflow readjustment

The integrated software controls and monitors the airflow to ensure that the user is supplied with the required airflow rate even in the event of a more and more saturated filter or decreasing battery power. If the system is no longer able to ensure the correct airflow rate the system automatically gives the user an optical and audible warning.

Ultralight

With only 435g in weight (Motor Unit + Battery Unit) the system is ultra-light. The blower motor impresses with its compact size and its weight of only 85g. Thanks to its very low weight the motor unit can directly be connected to a full face mask without a breathing hose. The lightweight and ergonomical design ensures an optimal weight balance of the unit and guarantees maximum comfort even during exhausting activities or in long-term use.

Wide range of components for every application

To complete the system, e-breathe offers a wide range of compatible face pieces, such as half and full face masks or hoods, filters and accessories. The system provides a large number of options and accessories to best fit your application.

Modular System

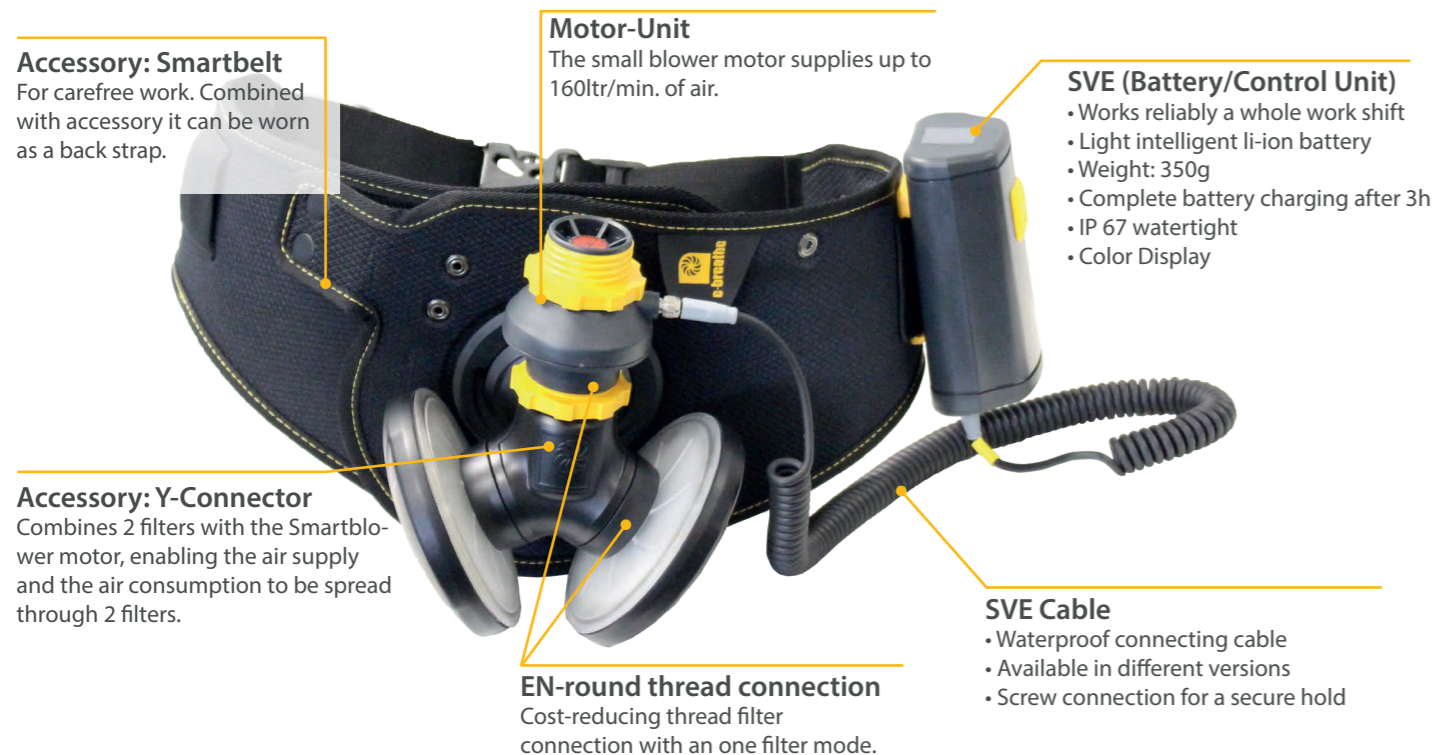
The Smartblower System was designed modular, which enables a quick and simple exchange of spare parts, to keep downtimes and related costs at a minimum.

Exchangeable Lithium-Ion Battery

The Battery/Control Unit consists of a Lithium-Ion Battery with a battery run from up to 8h. A second Battery/Control Unit can be used as an exchangeable battery and allows the user to work without a break. The simple and efficient quick charge system allows rapid charging (1 hour for 80% and 3 hours for the whole battery).

Protection Class IP67

The Battery/Control Unit and the Motor Unit feature heavy-duty design and achieve a high Protection Class IP67 (protection while temporarily submerged) in closed condition.



Smartblower Operating Modes

Respirator

Full Face Mask Mode:

The Motor Unit can be easily screwed frontally between a half mask or a full face mask and a filter into the screw thread of the mask. The lightweight Battery / Control Unit can be attached to the hip belt. The blower serves as a breathing support. It extends the application time and results in a work facilitation for the user.

- Suitable for all applications, which require a protection with a full face mask
- Breathing assistance for the user & extension of application time
- Cost-effective due to one filter mode & e-breathe filter system
- Work facilitation for the user

Technical Details:

- SVE Mode: SVE Full Face Mask Mode
- Number of filters: 1x Particle Filter
- Battery life: ca. 6-8 h
- Certification: CE Certification according to EN 12942



One Filter Mode:

The Motor Unit and the Battery/Control Unit are worn comfortably on a Belt. The Motor Unit and the hood are connected through a breathing hose which supplies the hood with breathable air. The blower builds up a constant overpressure inside the hood which prevents the intrusion of harmful substances. The blower is operated by only one filter and is therefore more cost-effective and more sustainable than other solutions.

- Possible application: pharmaceutical industry & disaster medicine
- No limits on application time & no G26 medical check-up

Technical Details:

- SVE Mode: SVE One Filter Mode
- Number of filters: 1x Particle Filter
- Battery life: ca. 6-8 h
- Certification: CE Certification according to EN 12941



Two Filter Mode:

The Y-Connector enables the usage of two filters. For this usage the Y-Connector can be easily screwed between the motor unit and the filters. An application with combination filters requires the two filter mode, because the high volume flow during the one filter mode prevents a sufficient filtration of harmful substances. The Y-Connector together with a blower and filter can be worn on a belt or can be assembled to the Smartbelt Backpack-System.

- Possible application: chemical industry

Technical Details:

- SVE Mode: SVE Two Filter Mode
- Accessory: Y-Connector required
- Number of filters: 2 x Particle Filters or 2 x Combined Filters
- Battery life: ca. 4-6 h
- Certification: CE Certification according to EN 12941



SVE (Battery/Control Unit)

PAP Respirator

The integrated color display provides an easy operation and convinces by its functionality. All important functions and information can be quickly accessed at all times. The optical and acoustic signal warns the user in case of a decreasing flow rate or battery run time or in case of a saturated filter.

The Battery/Control Unit consists of a Lithium-Ion battery with a battery run time from up to 8h. A second Battery-Control Unit can be used as an exchangeable battery and allows the user to work without an interruption of work. The simple and efficient quick charge system enables rapid charging (1 hour for 80% and 3 hours for the whole battery).

In order to ensure a reliable and safe operation of the system the SVE is adjusted customer specific and in accordance to the operation purpose prior to delivery. The following modes of operation are possible:

Full Face Mask Mode, One Filter Mode, Two Filter Mode



The color Display informs the user about:

Start Screen

Shows the individually configurable logo and the selected mode of the Battery/Control Unit (SVE).



Status Display

Display of the remaining battery time in real-time and the selected air volume.



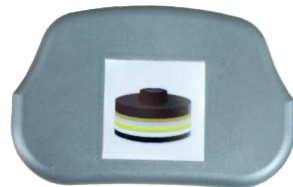
Battery Charging Cycles

Display of the Battery charging cycles of the SVE in the charging station.



Filter Information

Indicates the selected Filter Type (Particle or Combination Filter).



Operating Hours / Serial Number

Display of the operating hours and the serial number of the SVE.



Service Date / Version Number

Shows the next service date and the version number of the operating system.



Filter Warning

Alarm will be activated when a sufficient flow rate can no longer be guaranteed due to a saturated filter.



Blower Warning

Indicates an incorrect handling or a missing motor and blower unit.



Battery Warning

If the remaining battery time falls under 15 minutes the user will be automatically warned.



Y-Connector & Smartbelt

Accessory Respirator

Accessory for the Smartblower System:

Y-Connector



The Y-Connector combines 2 filters with the Smartblower motor, enabling the air supply and the air consumption to be spread through 2 filters. This is necessary when the Smartblower is used against gases.

To increase the air volume or to extend the lifetime of the filters the Y Connector can also be used with two particle filters.

The Y-Connector is available in 2 versions:

- **Y-Connector Hip:** Connected to the BeltClip it can be worn directly on the belt.

- **Y-Connector:** Due to the bayonet lock it can be connected directly to the back carrying Smartbelt System.

Smartbelt - Back Carrying System



The Smartbelt adapts excellently to the requirements of various application areas. It follows every movement of the user light and flexible and therefore supports him optimally on the activities to be performed.

Due to the modular construction of the components and the safety buttons at the Smartbelt, the system can be easily extended and the wearing position can be changed according to the users' requirements. The user can choose from five different wearing positions and combinations which enables him to attach the system for example to a hip belt or a backpack system.

The Backpack System combines comfort, safety and ergonomics. The back cushion made of functional foam ensures sufficient ventilation and wicks away warmth and moisture. The ergonomic harness construction perfectly distributes the weight to the hip and shoulder area. The bayonet locking at the Smartbelt ensures a safe and quick inclusion of the Y-connector.

Components Smartbelt:

Wings (basic unit)



Backpack Harness



Blower Belt



Buckle Band



Headgear for Smartblower Headgear

PM Full-Face Mask Panarea Pro - Art. Nr. 701007000

The new PM full mask Panarea offers highest wearing comfort. Due to the soft and skin-tolerable silicone rubber, the mask combines comfortable wearing qualities with a long durability. The arched panorama-viewing window offers an unlimited field of vision without restrictions. A scratchproof anti-fog screen is installed on standard. To extend the application time of the full mask, it was certified with the Smartblower which serves as a breathing support. Thanks to its very small size and its light weight, neither the view nor the weight of the mask are influenced.



- Highest wearing comfort
- Breathing support through Smartblower & work facilitation for the user
- Extension of application time, no increased breathing resistance
- Panorama window with scratchproof anti-fog screen
- SVE Mode: full face mask with 1x particle filter
- Certified according to EN 136 & 12942, Protection Class TM2

PM Lab Hood AV - Art. Nr. 700001008

The complete hood consists of a particle-tight, light, solid, lint-free material with integrated eye protection and shoulder covering. The especially for risks in the pharmaceutical industry and disaster medicine developed hood achieves, together with a blower, the highest protection class. The blower builds up a constant overpressure inside the hood so that it is working self-supporting and without any headgear. The airflow is passing inside of the hood along the PVC visor so that it is not blown into the face of the user.



- Universally adjustable headband for every head size
- Suitable for beards and spectacle wearers
- No G26 medical check-up & no limits on application time
- SVE Mode: one-filter mode with 1x particle filter | two-filter mode with 2x combination filter
- Certified according to EN 12941 Protection Class TH3

PM Chemical Hood - Art. Nr. 700001066

The complete hood is manufactured from antistatic chemical-resistant material. Eye protection and shoulder covering are integrated. The hood was developed for working environments with higher risks. Due to its materials, the hood protects against solid as well as liquid hazardous substances and toxics. The blower ensures a constant overpressure inside the hood and thus achieves the highest protection class. The airflow is passing inside of the hood along the PC-visor so that it is not blown into the face of the user.



- Chemical resistant material for maximum safety
- Unlimited big field of vision without distortion and unwanted creases
- No G26 medical check-up & no limits on application time
- SVE Mode: one-filter mode with 1x particle filter | two-filter mode with 2x combination filter
- Certified according to EN 12941 Protection Class TH3

e-breathe Multimask - Art. Nr. 322003999 Gr. M / 322004000 Gr. M/L

A new generation of face protection is introduced with the Multimask. The Multimask is lightweight, comfortable and maintenance-free. The off-centre lock enables quick and easy replacement of the visor. The visor gives a wide, unobstructed field of vision. The facial seal ensures maximum safety with maximum comfort. A further innovation is the airflow control, which leads the supplied air through the rotatable air pipe connector into different air channels. This enables the wearer to adjust the air supply to suit his or her own individual needs.



- Exhalation valve for discharging exhaust air and facilitating communication
- Wide selection of accessories for every application purpose
- Washable and exchangeable face seal made of various materials
- Battery/Control Unit (SVE) Mode: Two Filter Mode with Particle Filter
- Certified according to EN 12941 Protection Class TH3, Face Protection: EN 166 Class B






Smartblower Areas of Application






Head Pieces					
Application	Multimask	Full Mask	PM Lab Hood AV	PM Chemical Hood	Cleanroom Hood
Aluminium works	x	x		x	
Asbestos removal		x			
Nuclear industry		x		x	
Pharmaceutical	x	x	x	x	x
Lead processing		x			
Plumbing	x	x			
Paint spraying	x	x		x	
Chemical plants		x		x	
General maintenance	x	x	x	x	
Laboratories	x	x	x		x
Shipyards	x	x			
Foundries	x	x		x	
Agriculture	x	x	x	x	
Grain mills and silos	x	x	x	x	
Food processing industry	x	x	x	x	
Pest control	x	x		x	
Animal husbandry	x	x	x	x	
Grinding work	x	x			
Isocyanate processing	x	x			
Petrochemical	x	x			
Textile industry	x		x	x	
Demolition work	x	x			
Building & Construction	x	x			
Purification & Sewage	x	x	x	x	
Electronics/PCB manufacture	x		x		x

Starter-Packs & Filters

Order Information

The Starter Packs are intended for users with headpieces, which are already certified with the Smartblower System. In combination with a head piece, breathing hose and filters, the Starter Pack offers all necessary components to put the Smartblower System in operation.

Starter-Packs		
Starter-Pack	Part Number	Image
Includes: Motor, SVE One Filter Mode (Battery/Control Unit), charging station, blower belt, BeltClip, SVE spiral cable 2.0 DS		
e-breathe Smartblower One Filter System	322002100	
Includes: Motor, SVE Full Face Mask Mode (Battery/Control Unit), charging station, blower belt, SVE spiral cable 2.0 DS		
e-breathe Smartblower Full Face Mask System	322002200	
Includes: Motor, SVE Two Filter Mode (Battery/Control Unit), charging station, SVE spiral cable 2.0 DS, Smartbelt hip belt, Y-Connector		
e-breathe Smartblower Two Filter System	322002201	

Filters Smartblower				
Filter	Part Number	Protection against:	Color-code	Image
e-breathe Particle Filter P3 R SL	322002109	non-encapsulated filter: Solid and liquid particles of toxic agents, radioactive substances and microorganisms, e.g. bacteria and viruses.		
e-breathe ecoPAD P3 R SL (VPE 5)	322002110	Replacement filter medium for e-breathe Particle Filter Solid and liquid particles of toxic agents, radioactive substances and microorganisms, e.g. bacteria and viruses.		
PM Particle Filter P3 R SL	100052676	Solid and liquid particles of toxic agents, radioactive substances and microorganisms, e.g. bacteria and viruses.		
PM Combination Filter A2B2E2K2-P3 R SL	100043191	Organic, inorganic and acid gases and vapours as well as ammonia and organic ammonia derivatives, solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.		

Filter accessories: pre-filter, spark protection, filter cover, closing cap for filter, shower cover

Ready-Packs

Order Information

If you currently don't use a head piece, which is certified with our Smartblower, our Smartblower Ready Packs provide a ready-to-go solution. The Ready Packs consist of the same components as the Starter Pack variations and additionally include a head piece and a breathing hose. The ready-to-go system provides everything you will need to get started.

Ready-Packs		
Ready-Pack	Part Number	Image
Includes: Motor, SVE One Filter Mode (Battery/Control Unit), charging station, blower belt, BeltClip, SVE spiral cable 2.0 (DS), 1x particle filter P3, breathing hose PM Click flexible, Hood		
Ready Pack One Filter System with PM Chemical Hood	322002120	
Ready Pack One Filter System with PM Lab Hood AV	322002119	
Includes: Motor, SVE Full Face Mask Mode (Battery/Control Unit), charging station, blower belt, BeltClip, SVE spiral cable 2.0 DS, 1x particle filter P3, PM Full Face Mask Panarea Pro		
Ready Pack Full Face Mask-System with PM Mask Panarea Pro	322002133	
Includes: Motor, SVE Two Filter Mode (Battery/Control Unit), charging station, SVE spiral cable 2.0 DS, Smartbelt hip belt, Y-Connector, hose & head piece		
Ready-Pack Two Filter System with PM Chemical Hood	322002127	
Ready-Pack Two Filter System with PM Lab Hood AV	322002126	
Ready-Pack Two Filter System with Multimask M Industrial Line	322002121	
Ready-Pack Two Filter System with Multimask M/L Industrial Line	322002122	

Accessory & Spare Parts

Respirator

Accessory & Spare Parts		
Article Name	Part Number	Image
e-breathe motor (without cable)	322002102	
Battery/Control Unit (SVE)	3220021xx	
SVE One Filter Mode [1]	322002103	
SVE Two Filter Mode [3]	322002106	
SVE Full Face Mask Mode [2]	322002113	
e-breathe charging station	322002101	
SVE spiral cable 2.0 DS (double screw connection)	322002137	
SVE Cable, long & straight 2.0 DS (double screw connection)	322002139	
decontamination set	500510046	
BeltClip	322004021	
e-breathe blower belt	322002105	
decontaminable belt	302062996	
Y-Connector Hip (in combination with Belt Clip)	322003001	
Y-Connector (in combination with Smartbelt)	322003000	

Accessory Smartbelt

Respirator

Accessory & Spare Parts		
Article Name	Part Number	Image
Smartbelt System Includes: backpack harness, wings, buckle band, blower belt & bag	322003002	
Smartbelt Backpack Includes: backpack harness & wings	322003008	
Smartbelt Hip Belt Includes: buckle band & wings	322003009	
Components:		
Smartbelt Blower Belt Compatible with: BeltClip & Smartbelt Backpack	322003003	
Smartbelt Backpack Harness	322003004	
Smartbelt Wings	322003005	
Smartbelt Buckle Band	322003006	
Smartbelt Belt Extension	322003010	
Smartbelt Storage Bag	322003013	

PM Atemschutz



Willicher Damm 99 – 41066 Mönchengladbach – Germany

Tel: +49 (0)2161 / 40 290 0 Fax: +49 (0)2161 / 40 290 20

www.PM-Atemschutz.de

info@pm-ateschutz.de

PM Shop

Online Shop for Personal Protective Equipment

www.PM-Atemschutzshop.de

e-breathe

Development of Personal Protective Equipment

www.e-breathe.com

info@e-breathe.de

