

**Draeger AirBoss®  
Plus Series**  
NFPA Approved SCBA

**AirBoss® PSS 100 Plus**  
**AirBoss® Evolution Plus**

Safety

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Design

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Comfort

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Cost of Ownership

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Warning System Technology





Unique 3-position backplate fully adjusts to fit all torso lengths.



Padded pivoting waistbelt allows for unrestricted movement.



## AirBoss® PSS 100 Plus

AirBoss® PSS 100 Plus is designed to adjust to any firefighter. The revolutionary adjustable 3-position carbon fiber composite backpack gives the wearer a means to achieve the perfect fit for any torso size or length, quickly and without any tools!

The back plate actually *moves* with the user! The unique pivot point waist belt design allows the back plate to automatically lengthen and pivot with the users movements for true comfort and unrestricted movement. The weight of the SCBA rides on the hips, thus reducing back strain and increasing stability and balance providing a lower center of gravity. This design allows the wearer to work more effectively with less fatigue.

The AirBoss® PSS 100 Plus is a combination of proven technology and innovative design that is reliable, comfortable, as well as being easy to use and maintain. The AirBoss® PSS 100 Plus is NIOSH and NFPA 1981, 2002 Edition approved.

### Approvals

NIOSH 42 CFR, PART 84  
NFPA 1981 – 2002 Edition



# AirBoss® Evolution Plus



## AirBoss® Evolution Plus

The AirBoss® Evolution Plus lets you concentrate on the job at hand, not on your equipment. This Draeger high performance breathing apparatus, the AirBoss® Evolution Plus, is designed specifically for use in professional fire fighting applications. Reliability, durability, and comfort are the main objectives.

This ergonomically designed back plate and harness suspension system means less stress on the back and shoulders. A lightweight carbon one-piece composite back plate conforms to the shape of your back. The comfort harness suspension system removes weight reducing fatigue from the shoulders and applies it to the hips, where you are able to carry more weight.

With many options and accessories available, the AirBoss® Evolution Plus SCBAs can be tailored to meet your specific needs. Customize the AirBoss® Evolution Plus to your departments needs now or easily add accessories later. Be assured that with Draeger you'll get the highest quality product available.

### Approvals

NIOSH 42 CFR, PART 84  
NFPA 1981 – 2002 Edition



# AirBoss® Performance Features



## Prism® Pressure Information System

The Prism® Pressure Information System, is the only in-mask wireless Heads-Up-Display (HUD). A transducer/transmitter is located on the gauge line and quantitatively measures the air pressure in the SCBA cylinder. Automatically activated when the cylinder is turned on, it continuously transmits real-time pressure levels via inductive loop technology to a receiver (display unit) inside the user's facemask. A series of lights on the receiver indicate air pressure and alert signals. The user is kept continuously updated as to the quantity of air remaining in their SCBA air cylinder by the Prism® system.

If the SCBA were used for a 30-minute period per day, the batteries would last for approximately 20 months. The Prism® System uses long lasting commercially available lithium batteries.

The wireless feature of the Prism® eliminates connecting wires that are a potential snag hazard. There are no wires, so there is less maintenance to the SCBA. The Prism® display unit is located inside the mask, protected from heat, dirt, water and smoke. The low profile design does not interfere with the user's field of vision and the photocell automatically adjusts the display brightness to the correct intensity for the ambient lighting conditions.



## AirBoss® Sentinel II

The Sentinel II is a fully integrated "Life Support Monitoring Device" for fire fighting SCBAs. It is both a cylinder pressure indicating gauge and an integrated PASS warning device with visual and attention demanding (>95 dBA) audible warning system.

The current cylinder pressure is indicated on a dual analog/digital backlit gauge. The Sentinel II automatically calculates and displays real time to the low-pressure alarm based on the user's actual consumption rate. Two high-intensity flashing lights and a loud "chirping" alarm are used for the low-pressure warning signal.

All data is recorded and stored within the Sentinel II (time/date, cylinder pressure, breathing rate, alarm activation, and thermal absorption temperature) and can be downloaded at a later time.

### Approvals & Specifications

PASS: NFPA 1982, 1998 Edition  
Intrinsic Safety: UL/ULC; Class I,  
Division 1, Groups A-G  
Power Supply: 9-Volt Alkaline Battery



## Harness Suspension System

To compliment the ergonomic back plates of the AirBoss® Plus Series of SCBAs, Draeger has designed a comfortable and rugged harness suspension system. The entire system is designed to move the weight of the SCBA away from the shoulders and onto the hips to reduce back and shoulder stress to the user.

The SCBA harness straps are constructed from a Kevlar/Aramid U-blend interwoven material that provides a superior combination of strength, abrasion resistance, and temperature resistance. The shoulder pads and comfort waist harness further reduce stress to the user.

All AirBoss® Plus SCBAs are easy to don and adjust due to the large low profile friction buckles and quick adjust pull forward harness straps. Even when wearing gloves, the large friction buckles are easy to grasp and move for a custom fit to any size fire fighter.

# AirBoss® Performance Features



## First Stage Pressure Reducer

Breathing air, when you need it, as much as you want, at any time, even in the most demanding situations. The AirBoss® Plus series of SCBAs incorporate a fail safe design high performance balanced piston first stage pressure reducer, with excellent flow characteristics of up to 1000 liters per minute. The first stage reducer is small, lightweight and is attached directly to the back plate for maximum protection from any impact. A loud (> 90 dBa) high performance-warning whistle and patented safety pressure relief valve is positioned at the reducer. The reducer incorporates a unique, modular plug-in design that allows for the easy connection of accessories. All of this is covered by Draeger's lifetime warranty.



## Plus Lung Demand Valve

The high-performance lightweight balance piston Lung Demand Valve (LDV) delivers in excess of 550 liters/minute of air, supplying all the air that anyone would use, even under the most strenuous working circumstances. The Plus LDV is a single directional airflow system and when connected to the Panorama Nova facemask, is not subjected to cross contamination.

Extremely quiet, the Plus LDV is a positive pressure system that is activated on the first breath. The donning button allows the LDV to be in a stand-by mode for quick activation when need. Even when wearing gloves, the ergonomic design of the Plus LDV allows the user to easily connect and disconnect from the mask.



## Panorama Nova Facemask

Draeger's exclusive triple sealing edge means that there are actually three sizes in one mask, therefore, the Panorama Nova mask will fit all users. The large unobstructed lens and small Plus LDV means that the SCBA user will maintain over 90% of their normal field of vision without distortion. A stainless steel speech diaphragm provides clear communications with others.

The non-directional plug-in connector easily allows donning of the Draeger Plus LDV. The inhalation valve of the Panorama Nova P Mask in conjunction with the exhalation valve eliminates cross contamination of the LDV. The Panorama Nova P Mask can be cleaned and decontaminated without any tools or disassembly.





## Rapid Intervention Crew Universal Airline Coupling (RIC UAC)

The new NFPA 1981 standard for SCBA, 2002 Edition calls for all approved SCBAs to be equipped with a Rapid Intervention Crew Universal Airline Coupling (RIC UAC). The RIC UAC allows the connection of a secondary air source to rescue downed firefighters. The Draeger fill lines will supply air to any SCBA manufacturer's RIC UAC.

On the AirBoss® Plus series of SCBAs, the RIC UAC is positioned parallel to the back plate where it provides easy access for airline connections. The unique positioning of the Draeger RIC UAC provides excellent protection against impact or snagging hazards for increased safety to the wearer.



## Super I-PASS II

For users who do not want the added features of the Sentinel II, Draeger offers the Super I-PASS II, a fully integrated Personal Alert Safety System "PASS" that meets the rigorous demands of NFPA 1982 -1998 edition.

This rugged and lightweight (7 oz/220 g) PASS device uses a highly sensitive motion sensor, which eliminates false alarms. A manual panic button can also be used to activate the audible and visual warning systems. The Super I-PASS II is available in either waist mounted or over the shoulder versions.

### Approvals & Specifications

I-PASS: NFPA 1982, 1998 Edition  
Intrinsic Safety, (ETL): Class I, II & III;  
Division 1; Groups A-G  
Power Supply: 9-Volt Alkaline Battery



## SCBA Cylinders

Draeger offers SCBA cylinders in different sizes and construction to meet the demands of different applications. Cylinders are offered in 2216 (low pressure) and 4500 psi (high pressure) operating pressures. Durations of 30, 45 and 60 minutes (@ 40L/min breathing rate) are available. Choose from aluminum, fiberglass hoop wrapped, fiberglass full-wrap, or light weight carbon fiber full-wrap construction.

SCBA cylinder valves are constructed of anodized aluminum with a built in bumper protector. The valve gauge is double sided with a luminescent gauge face for easy readability. Custom labeling is available on Carbon Fiber Full-wrapped cylinders. Contact your local Draeger representative for details.





## BAcomm

The BAcomm communication system offers advanced communication flexibility for use with the Panorama Nova mask and a wide range of communications equipment. The microphone of BAcomm is inside the mask and offers exceptional speech clarity. This assembly mounts directly to the mask and serves as the platform for voice amplification, radio interface, or both. The radio interface includes an earpiece and a large Push To Talk (PTT) button for easy operation with gloves or when inside a protective suit.

The entire assembly is extremely rugged and will meet the demands of fire fighting and industrial applications. The components are weather proof and are easily cleaned or decontaminated. It is an approved option on all Draeger NIOSH and NFPA 1981-2002 edition SCBAs and is approved as intrinsically safe for Class I, II & III; Division 1; Groups A-G atmospheres.



## Hair Net Head Harness

The Panorama Nova can be fitted with a flame resistant hair net harness. The five-point harness assures a good fit and allows for easier donning and doffing and reducing the possibility of the head harness pulling on your hair.



## Multi-Link Auxiliary Airline System

Draeger offers a 20-inch and 40-inch line length on the new Multi-Link Auxiliary Airline System offering increased versatility and safety. Attaching directly to the first stage reducer, the Multi-Link system features a unique easy to use Y piece with female and male CEJN fittings. This unique configuration allows rapid connection to either an airline source i.e. RIT pack or in extreme emergency cases to another Multi-Link Auxiliary Airline. A Nomex pouch is provided with the system and attaches to the waist belt for convenient storage and easy retrieval.



## Carrying Case

Protect your Draeger AirBoss SCBA during transportation and storage. The hard-sided plastic case offers the best protection and is colored orange for high-visibility. It can also be wall mounted for industrial applications. Also available is our soft-sided nylon SCBA duffel which is lightweight and great for transportation.



## AirBoss® RIT LifeGuard

Rapid Intervention Teams require specialized and rugged equipment to rescue victims or downed firefighters. The AirBoss® RIT LifeGuard will accommodate your choice of a 30, 45 or 60-minute 4500 psi cylinder in a heavy-duty, padded and fire resistant, cordura bag. A high pressure fill line can also be added as an option to the RIT LifeGuard. The fill line connects directly to the new RIC UAC (which is part of the new NFPA 2002 Edition) connector on the SCBA.

Air is delivered by the same high-performance pneumatics found on the AirBoss® Plus SCBA delivering in excess of 1000 liters/minute if needed.



## RAPID Adaptor

The Draeger RAPID Adaptor offers a quick, convenient and cost effective way to convert the Panorama Nova Mask from positive pressure to an Air Purifying Respirator. It simply snaps into the mask like the LDV and has a threaded connection for accepting one of our full line of NIOSH approved cartridges.



## Innovation

Draeger Safety is the world's leader in SCBA for the Fire Service. We have led the way in design by using state of the art technology and materials. We were the first manufacturer to introduce a mask mounted lung demand valve, ergonomic back plates and harness suspension systems, and integrated electronic warning systems into the design of a SCBA. In fact Draeger revolutionized the SCBA world as we were the first manufacturer to introduce the Sentinel, a fully integrated electronic warning system that monitored vital functions and provided real time information to the fire fighter.

## Ordering Information

Draeger SCBAs are individually designed systems that are tailor-made to suit the firefighter or fire department's needs and requirements. We offer choices in masks, cylinders, back plates, warning systems, communication systems and accessories. Contact your local Draeger representative listed below.

## World Leader

With more SCBAs in service around the world than any other manufacturer Draeger Safety is truly the world leader. We have been manufacturing SCBAs for the fire service industry for over 100 years. You can be confident that Draeger meets the needs of the fire service. To create the AirBoss® Plus series of SCBA, Draeger Safety worked with fire departments across North America to develop a more technically advanced and reliable SCBA for the fire services.

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The Draeger Quality System has been registered to ISO 9001, edition 2000.