

DATA SHEET

SE400AT-2 positive pressure demand respirator for CBRN materials



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Description:	Positive-pressure demand respirator. The respirator is microprocessor controlled and supplies positive pressure breathing air even at very hard work. The SE400 features in-mask communication, a comprehensive warning system, and a usage log which can be downloaded to a personal computer for further analysis.
Product name:	SE400AT-2
Use:	Used for SCBA-level protection (with full face mask) in filtrable, non-IDLH atmospheres with an oxygen content sufficient for human breathing
Face pieces :	<p>Full face mask — available in two materials:</p> <ul style="list-style-type: none"> • Halo-butyl • Natural rubber <p>The face pieces contain no electrical parts, and feature an internal pressure sensor, internal microphone, and a warning light in the user's field of vision</p>
Regulator:	<ul style="list-style-type: none"> • Flow capability of peak inhalation air flow in the inner ori-nasal mask of 400 l/min or higher. • Breath responsive: air supply continuously adjusts itself to user's air requirements • 7–14 mBar supply pressure • Easy service — no tools • Tested for equivalent of 3 years' harsh condition • Acts as negative pressure filter respirator if positive pressure is lost (e.g. battery runs out)
Communication:	All face pieces feature a built-in microphone which connects through the fan unit to an external miniature loudspeaker
Fan unit:	<ul style="list-style-type: none"> • Single button operation • Auto power-off when removing mask • LED light indicators • Com-port for loudspeaker or personal computer • Brush-less DC motor • Continuous monitoring of motor function • Microprocessor controlled motor • Demist mode provides the user rapid supply of extra air for 20 seconds that not only cools the user's face but also demists the visor of the full face mask
User alarms:	<p>The user immediately receives both audible and visual alarms (through a siren and a warning light in the user's field of vision) upon a range of events, such as:</p> <ul style="list-style-type: none"> • Filter change required • Low battery power • Mask pressure dip • Various other system alerts
Power supply:	<ul style="list-style-type: none"> • 2-hour battery recharge • Ni-Mh battery technology — no memory effect • Approximately 4 hours' operation at medium work load • Microprocessor controlled battery charger for long life and battery maintenance • Two batteries supplied with unit <p>A dual battery supply is also available, effectively doubling the time of operation</p>
Data log:	<p>Fan unit continuously records and time-stamps all vital system information, including:</p> <ul style="list-style-type: none"> • All alarms issued • Total air volume drawn through the filters

- Power on/off
- Mask removed

NOTE: The use of the data log feature is completely optional, and is in no way necessary for the general operation of the SE400AT-2

Software:

Data log and real-time system monitoring software is included as a simple-to use Windows application.

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Computer interface:

Standard serial port

Carry devices:

The unit can be worn in a variety of ways, with the breathing hose either around the side of the body, or over the shoulder:

- On a conventional waist belt
- On the standard waist belt (supplied)
- On a padded extra strength waist harness with or without shoulder braces (optional)
- On a back pack with padded shoulder straps and waist harness (optional)

Weight:

SE400 with full face mask and particle filters: 2.93 kg (6.46 lbs)
SE400 with full face mask and DP filters: 3.62 kg (7.98 lbs)

Accessories:

A range of practical accessories include:

Hoods:

- Cloth flame/spark resistant welding hood with inner bib
- Cloth flame/spark resistant welding hood without inner bib
- Cloth flame/spark resistant welding cover for breathing hose
- Clip-on welding visor for full face mask
- Tyvek disposable hood with inner bib
- Tyvek disposable hood without inner bib
- Tyvek disposable cover for breathing hose
- PVC hood without bib

Carrying devices:

- Back pack
- Padded waist belt (long or short) with braces
- Padded waist belt (long or short) without braces

Head harnesses:

- Cloth head harness for full face mask
- Cloth head harness for full face mask, suitable for use with hard hat

Spectacle inserts:

- Spectacle insert for full face mask

Protective suits:

- Tyvek disposable dust suit
- PVC fully encapsulated suit
- PE-coated Tyvek disposable chemical suit
- Tyvek F disposable chemical suit
- Pressurization hose

Visors for full face mask:

- Polycarbonate (standard)
- Heat resistant visor
- Laminated glass
- Disposable clear visor covers

Other:

- Belt attachment for SE-Talk communication unit
- Test half face pieces (3 sizes) for performing face piece fit tests
- Cloth storage bag for full face mask

Storage:

Store at room temperature in clean, dry place

Warranty:

The SE400 is supplied with a comprehensive warranty, covering the motor and the main circuit board for three years or 6,000 operating hours, whichever comes first.

Other parts are covered for 12 months for manufacturing faults (not including wear and tear). Some exclusions apply.