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# Data Sheet: Sundström SR500ex

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## Intrinsically safe PAPR

### Description

Intrinsically safe (i.e. for use in explosive or ignitable atmospheres) battery-powered, fan-assisted air-purifying respirator that can be used as an alternative to negative-pressure filter respirators where these are recommended. This applies particularly to extended periods of hard work in warm conditions. The fan can be used with certain Sundström hoods, face shields or full face masks. The fan unit is fitted with a suitable filter, and the filtered air is fed through a hose to the facepiece.

### Features

- Intrinsically safe
- Single-button operation
- Visible and audible alarms in case of interrupted air delivery
- NiMh battery
- Up to 6.5 hours' operation
- Approximately 2 hours' recharge time
- Supplied with 2 filters/combinations
- Can be used with hoods (SR520, SR530, SR561, SR562, SR601, SR602), shield SR540ex, or full face mask SR200

### Visual display

- Normal operation
- Boost fan operation
- Dip in air flow/clogged particle filters
- Battery low
- Air flow obstruction

### Air flow rate

- 175 l/min (normal operation)
- 225 l/min (boost operation)

### Battery

13.5 V, 2.1 Ah, NiMh, energy density\* 28 Wh (2.8 Wh/cell)

\*) Energy density refers to new generation batteries — available late 2021

### Operating time

- Normal mode: 6.5 h with P3 filter
- Boost mode: 4 h with P3 filter

**Temperature range** — Operation: -10°C to +40°C at <90% RH  
— Storage: -20°C to +40°C at <90% RH

**Low flow warning** <175 l/min

**Filter thread** Rd 44 x 1/7"

**Weight** With battery and P3 particle filter: 1,840 g

**Protection factors** — With hoods and shields: 200 (TH3)  
— With full face mask: 1,000 (TH3)

**Intrinsically safe classification**  (The IECEx symbol for explosion risk)

— **II 2 G Ex ib IIA T3**(with SR540 shield or SR200 full face mask with polycarbonate visor)

— **II 2 G Ex ib IIB T3**(with SR520, SR530, SR561, SR562 or full face mask SR200 with glass visor)

— **II 2 D Ex ibD 21 T195°C**(with any of the above)

## Explanations

<i>MARKING</i>	<i>MEANING</i>
II	Equipment group (explosive atmosphere other than mines)
2 G	Equipment category (2=high protection level, zone 1, G=gas)
2 D	Equipment category (2=high protection level, zone 21, D=dust)
Ex	Explosion protected
ib/ibD	Type of ignition protection (intrinsic safety)
IIA	Explosion group Propane
IIB	Explosion group Ethylene
21	Zone with combustible dust
T3	Temperature class, gas (+200°C max, surface temperature)
T195°C	Temperature class, dust (+195°C max, surface temperature)