



Drop-in fast charger

#### APEX I.S.

The Apex range of personal air sampling pumps now feature two intrinsically safe versions, the Apex Standard I.S. and the Apex Pro (Programmable) I.S. version. Fully compliant to ATEX 100 (94/9/EC) & UL 913 ANSI standards, the approved versions allow occupational hygienists and specialists to undertake personal and area sampling for dusts, fumes, gases and vapours in hazardous, classified areas where potentially explosive atmospheres may be present.

#### KEY FEATURES:

- **ATEX & UL Certified**  
Can be used to sample dusts, gases and vapours in areas including hazardous zones.
- **Ease of Use**
- **Robust dependable design**  
For use in harsh environments.
- **Comprehensive Flow Range 5ml - 4L/min.**  
(5 - 750ml/min with low flow adaptor)
- **Convenient "Drop-in" Fast Charger**  
Full charge in less than 4.5 hours.
- **Rapid charge in 1.5 hours**  
allows 8 hours operation.
- **High Capacity NiMH Battery**  
Provides outstanding run times >18 hours (@2L/min via GFA).
- **Digital flow control circuitry**  
Allows up to 1 month between calibrations.
- **Multi-Language.**
- **Data Logging Version (Pro)**  
Run data can be stored and downloaded via IR port.
- **Gas Bag Outlet.**

#### ADDITIONAL FEATURES

The Apex pumps feature **digital control technology** giving exceptional long-term flow stability with an accuracy of  $<\pm 3\%$  of set-point.

The **Bag Mode** allows users to automatically undertake grab sampling into Tedlar gas bags. The unit automatically shuts down when full.

A **large LCD** displays real-time flow rate, volume sampled, temperature & true flow parameters. Programmable versions can be configured via software with **scheduled on/off sampling regimes** allowing the unit to be left on site to automatically sample when required. Data is downloaded via cable free IR interface direct to PC. The versatile Pump Manager software conveniently stores sample data for audits and record keeping purposes.

## Specification

Typical filter pressure load in cms H<sub>2</sub>O, typical battery life in hours for I.S. Models

| Filter Type | 1.0 L/min    | 2.0 L/min    | 2.2 L/min     | 3.5 L/min    |
|-------------|--------------|--------------|---------------|--------------|
| 25mm GFA    | 5cm, 34 Hrs  | 9cm, 18 Hrs  | 9.5cm, 17 Hrs | 16cm, 10 Hrs |
| 25mm 0.8µm  | 18cm, 18 Hrs | 31cm, 10 Hrs | 34cm, 9 Hrs   | NA           |
| 25mm 1.2µm  | 11cm, 24 Hrs | 21cm, 13 Hrs | 23cm, 11 Hrs  | NA           |
| 37mm GFA    | 3cm, 41 Hrs  | 5cm, 22 Hrs  | 6cm, 19 Hrs   | 9cm, 12 Hrs  |
| 37mm 0.8µm  | 7cm, 30 Hrs  | 13cm, 16 Hrs | 14cm, 15 Hrs  | N/A          |

|  |  |
|--|--|
| Flow Range   | 0.8 - 4.0L/min (5-750ml/min with low flow adaptor)   |
| Inlet pulsation ratio                              | < 10% using Dewell Higgins Cyclone @ 2L/min approx 7.5cm H <sub>2</sub> O.<br>Satisfies EN1232 , NIOSH 0600                                    |
| Displayed values                                   | Real flow rate, volume sampled, elapsed sample time, temperature, operating mode, program details  |
| Flow control accuracy                              | <±3% for selected flow   |
| Operating temperature                              | 5°C to 40°C  |
| Storage temperature                                | -10°C to + 50°C  |
| Charging technique                                 | Drop-in Intelligent fast charger. dV/dt Fast-charge termination with safety time out.<br>Standby trickle charge mode keeps pump ready for use. |
| Typical charge time                                | 4.5 hours for full charge from complete discharged condition   |
| External PSU (for drop-in charger)                 | Output 12VDC, 0.8A, Universal input voltage (110 / 240V)   |
| Memory back up time with main battery pack removed | Approximately 5 minutes  |
| Communications                                     | Infra-red (via RS232)  |
| Service Interval                                   | >2500 hrs (Typically)  |
| Recorded values                                    | Start & stop times, flow rate, average sample temperature, volume sampled.   |
| Dimensions (including battery)                     | Approx 135 x 75 x 43mm   |
| Weight (including battery)                         | 500g   |
| <b>ATEX 100 (94/9/EC)</b>                          |  |
| Rating   | Ex II 1 G  |
| Certification code                                 | EEx ia IIB T4  |
| UL: ANSI / UL 913                                  | Class 1, Groups C & D  |

## Ordering Information

|                                |  |
|--------------------------------|--|
| Apex Standard I.S              | 182150B                                  |
| Apex Pro I.S                   | 182160B                                  |
| Battery pack for I.S. variants | 182013C                                  |
| Low flow adaptor assembly      | P109032                                  |
| Pack large charcoal tubes      | P109019                                  |
| Pump Manager software kit      | 182091A                                  |
| Single drop in charger base    | 182261B                                  |
| 5-way drop in charger          | 182264A (UK) 182265A (Euro) 182266A (US) |
| Apex starter kit               | P104104                                  |

## Contact Details

|         |                          |                          |  |
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