# Lear Siegler Australasia

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# HIVOL
# Specification Sheet

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This design provides many significant advantages over other units, including;

- Constant air flow - maintained well within 1% of the preset flow rate in conditions ranging from clean filter to more than 80% blockage.
- True mass-flow sensor - no need for temperature and pressure corrections.
- Low energy consumption - because motor load is determined by the filter load and not by mechanical restrictions.
- Low wear and long life because of low load - the vacuum pump has been proven in power stations at full load around the clock for many years. The absence of other mechanical or moving parts eliminates problems found in some products.
- Low noise, quiet running - does not attract attention or annoy neighbours.
- Soft start drives - ensuring the start current demand is kept at a very low level.
- User-friendly filter collection and replacement - no more struggling with fragile tissue on-site in bad weather. The unique removable filter support and transport cover allows filter loading and recovery in a protected laboratory environment without risk of losing the sample.
- Secure casing - preventing dust and water ingress while permitting easy access for service.

The Flow-Set incorporates Andersen's well-proven PM10 and PM2.5 Heads allowing it to sample a variety of particle sizes. The heads have been wind tunnel tested to ensure accurate cut points.

## Flow-Set High Volume Air Samplers Specifications

| | |
|---|---|
| Air Intake | Uniform, 58,000mm2 nominal air intake |
| Power Input: | 240V, 50Hz, Single Phase |
| Start Current: | Switching Transient up to 5.0amp. Ramp up current 4 amp |
| Vacuum Pump/Motor: | Siemens Elmo-G, Three Phase, 60Hz Rated at 1.3kW |
| Motor Drive: | Variable Frequency, Soft Start |
| Flow Control: | Mass Flow Sensor and PID Controller (Unaffected by variation in the ambient air temperature and pressure) |
| Flow Control Precision: | Better than 1 SCMH from clean filter to 75% blocked filter, at 70 SCMH |
| Noise Profile: | (when running at 70 SCMH with clean filter and silencer)<br>At 1 meter = 50dba<br>At 2 meters = 44dba<br>At 4 meters = 38dba<br>At 6 meters = 35dba<br>At 8 meters = 32dba |
| STANDARD CONTROL | |
| Event Timer: | 7 day, Programmable |
| Hour Run Clock: | 240V Synchronous |
| Filter Support | 230 x 280mm (removable) (2 off, one with transport cover supplied as standard) |
| OPTIONAL CONTROL | |

Programmable Controller with Data Logging and Interface for Remote Control, Meterological Instruments and Real Time Dust Monitors

| | |
|---|---|
| Filter Size: | 20.3 x 25.4cm (8 x 10 inch) (Nominal) |
| Cabinet Dimensions: | 400 x 340 x 1050mm High |
| TSP Head Dimensions: | 450 x 450mm square |
| PM10 Head Dimensions: | 710mm Diameter + 500mm Height Increase to overall Height |
| Overall Height: | 1140mm Nominal |
| Weight: | 47kg |
| Temp Range: | -10C to +50C |
| Flow Setting Range: | 20 - 100 SCMH |
| Flow Indication Range: | 20 - 100 SCMH |
| Complies with: | AS 2724-3-1984 Section 4 |