Function: Portable device for logging CO and PM concentration

Sensors

1. Carbon Monoxide:
   Type: Electrochemical cell
   Range: 0 – 1000 ppm
   Repeatability: 2%
   Resolution: 1 ppm
   Response time: T90 = 30 seconds

2. Particulate Matter:
   Type: Red laser scattering photometer
   Range: 0 – 60,000 ug/m3
   Resolution: 25 ug/m3
   Response time: 1 second

Features

- RS-232 Serial Port Output (includes Prolific USB adapter)
- LED indicator Light: Five second blink indicates meter is on
- Microprocessor controlled power management for long battery life
- Selection Switch for 3 Sampling Speeds
  - Fast Mode: One sample every 9 seconds
    - 3 day battery life
  - Medium Mode: One sample every 51 seconds
    - 2 week battery life
  - Slow mode: One sample every 9.7 minutes
    - 1 month battery life
• Data Logger
  Sampling Method: Delta Sigma (exceptional noise filtration)
  38 microvolt resolution
• CO over-sampling for additional noise filtration
• Stores calibration constants in memory
  Data Storage Disk: Removable Secure Digital 256 MB

**Sample Intake:** Microprocessor controlled 1.8 cfm fan

**Weight:** 860 grams

**Size:** 13 x 20 x 8 cm

**Battery:** 7.4V Li-ion, 5700 mAh

**Software included**
• Microsoft Excel Compatible Data Processing Software
  Outputs include:
  o Average concentrations
  o Maximum/minimum concentrations
  o Max/min 15 minute average concentrations
  o LiveGraph for graphing real-time output
  o Serial port communication software for Windows, Mac, and Linux

**Accessories included**
• Backpack and sample tube for exposure monitoring
• Battery Charger
• RS-232 serial port connector cord with Prolific USB adapter

**Calibration Requirements**
• Particulate Matter sensor is factory calibrated – requires regular cleaning
• Carbon Monoxide sensor comes factory calibrated – requires calibration once per month during use