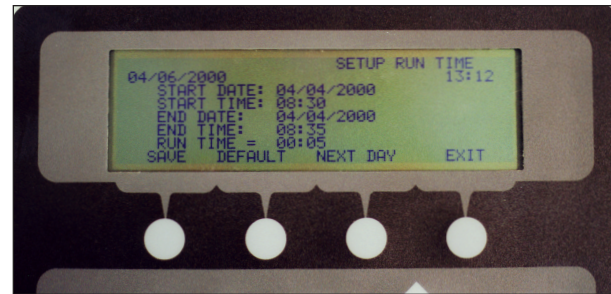
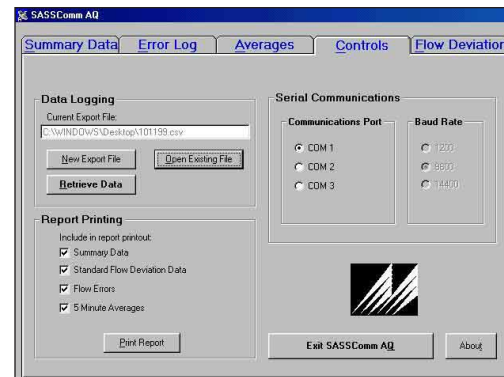


# Specifications

Supplied Software, SASSComm allows the user to transfer data to Laptop PC, Modem, or Data Transfer Module.



- Analytes:**
- PM<sub>2.5</sub> Mass and Trace Metals
  - PM<sub>2.5</sub> Organic and Elemental Carbon
  - PM<sub>2.5</sub> Sulfate, Nitrate and other ions
  - PM<sub>2.5</sub> Elements
- Canisters:**
- SASS Five (5), Four (4) Canisters with One (1) duplicate
  - SUPER SASS Four (4), or Eight (8) Canisters
- Programming:**
- SASS Single Day set by Hot Key Command
  - SUPER SASS Single or Sequential Days set by Menu Command
- Flow Rate:** 6.7 Actual Liters/min (+0.1, -0.2)
- Inlet:** Sharp Cut Cyclone (SCC), (D<sub>50</sub> 2.5µm AED) Detachable from canister
- Power:** 110AC/60Hz (optional 230 AC/50 Hz)

# SASS/SUPER SASS™ Speciation Samplers

Met One's Speciation Samplers are designed to comply and exceed EPA Speciation requirements. Two models provide a choice for compliance monitoring: SASS is a 5 channel sampling system and SUPER SASS is 8 channel, multiple event sampling system. The SASS conforms to original EPA requirements and SUPER SASS adds benefits suggested by state and local authorities.

Both models use concepts pioneered by Met One Instruments, such as the contamination free Canister, solar radiation shield, and modular design.

SASS and SUPER SASS not only comply to EPA specifications they exceed the specifications, as proven in EPA and California Air Resources Board field studies.

#### SASS

- Portable integrated ambient particulate sampling system
- Inlet for PM<sub>2.5</sub> at 6.7 liter/minute sample rate
- Solar shield maintains cassettes to less than 5°C over ambient temperature
- Canister provides data integrity - contamination proof
- New multi-cell denuder and multiple filter medias



## Met One Instruments, Inc.

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 Regional Sales & Service: 3206 Main Street, Suite 106, Rowlett, Texas 75088 • Tel 972/412-4747, Fax 972/412-4716  
<http://www.metone.com>

 Met One Instruments, Inc.

# SASS/SUPER SASS™

► **SUPER SASS**

This unit offers all the features of the SASS plus it has sequential programing to allow multiple day operation. SUPER SASS will sample up to eight days depending on the number of sample channels used per day. SUPER SASS comes standard with four independent volumetric flow controllers, one for each sampler group.

**SUPER SASS, Additional Features**

- Up to 8 Channel Operation
- One to Eight day Sampling, Sequential
- Automatic Volumetric Flow Controllers
- Each Channel may be operated independently
- Advanced Field Audit Screens

► **Testing and Experience**

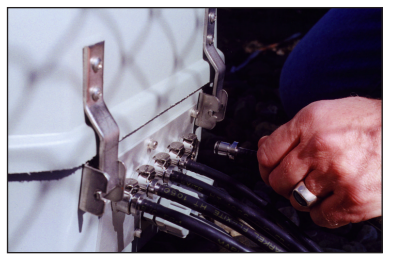
The SASS and SUPER SASS are based on designs that have been field tested for eight years with 3 years of testing in the EPA program. This testing has proven the concept and helped to refine the design.

► **Portability**

Designed for programs on the move, both units offer superior flexibility and portability. SASS and SUPER SASS are composed of a portable pump box, tripod, sample head and controller, they are easy to carry and easy to install. Installation takes less than one hour.

► **No Field Maintenance**

The SASS allows all critical maintenance to be performed in the lab. Other instruments suffer contamination of inlet, manifold and PM2.5 separator because they must be serviced in the field. With the integrated canister every element of the sampler that is contacted by the sampled air stream is cleaned with each sample change.



► **No Field Contamination**

Sample Canisters are loaded in the lab, with blank filter cassettes. Sealed canisters are shipped to speciation field sites for deployment. After exposure the canisters are sealed for shipment to the lab. This approach circumvents contamination due to field handing of the sample.



► **Temperature Control**

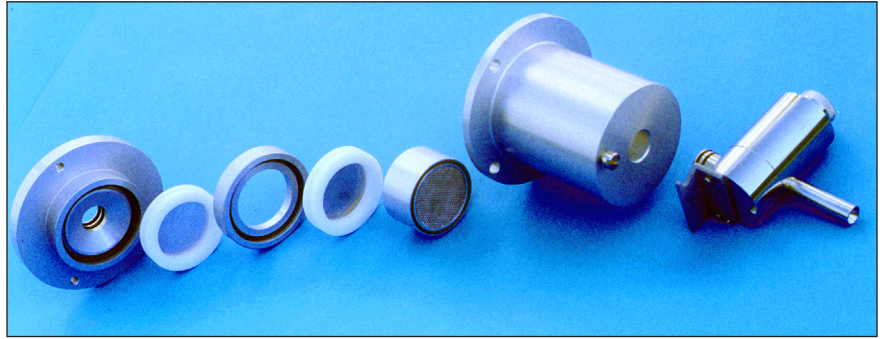
SASS incorporates a convective solar radiation shield to maintain the samples within 5°C of ambient temperature.

► **Field and Lab Tested PM 2.5 Inlet**

A Sharp Cut Cyclone (SCC) with a flow of 6.7 liters/min is integrated in every sampling canister to remove particles larger than 2.5µm aerodynamic diameter. Test report available upon request.

► **Canister Configurations**

The sample canister contains the SCC all necessary components for excluding particles above 2.5 µm aerodynamic diameter, for removing interfering gases, and for collecting particles including semi-volatile. The sampling canisters are designed to accommodate denuders and one or two filters for sampling of semi-volatile species, and for collection of gases such as nitric acid, ammonia, and



(4) Tandem Quartz for organic and elemental carbon, with backup filter for artifact correction, (5) Denuded carbon-impregnated filter for semi-volatile organic compounds.



speciation

continuous

monitoring

formic acid. For example, a Teflon Nylon filter pair can be operated behind a nitric acid denuder to give inorganic ions and nitrate in the same cassette. Canisters can be used as follows: (1) Teflon filter for mass and trace metals, (2) Teflon or Quartz for inorganic ions by ion chromatography, (3) Denuded Nylon or impregnated filter for nitrate,

