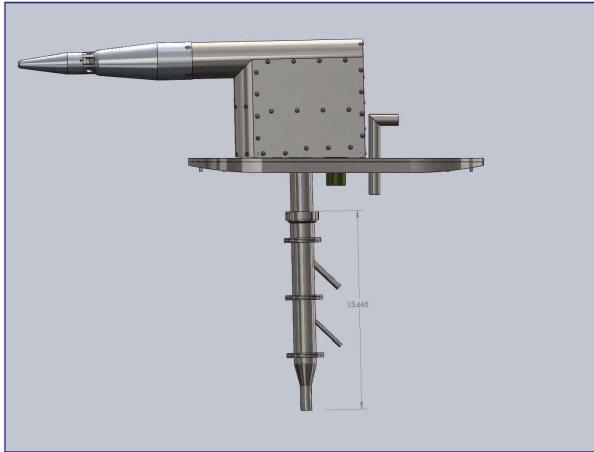


# BMI: Isokinetic Inlet System - Model I200

BMI offers an Isokinetic aerosol sampling inlet system tailored to meet your needs. Both aircraft and ground-based systems are available.

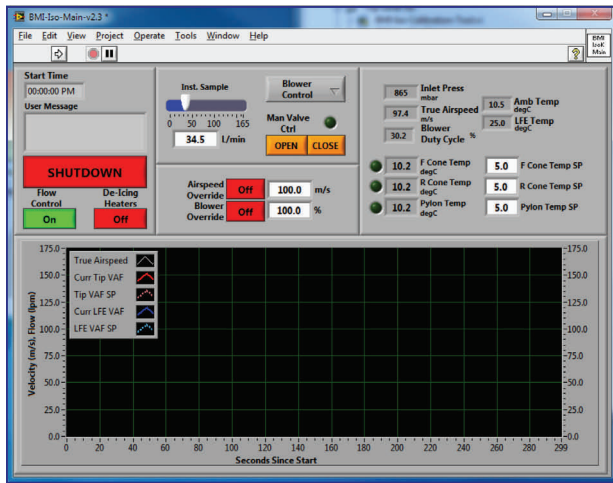
*Inlets are offered with or without isokinetic flow control, where the sample flow rate is automatically controlled to match the ambient air speed. Performance is validated through wind tunnel testing and computational fluid dynamics modeling.*



ISO Inlet Model I200, Shown with diffusers, shroud and pick off ports

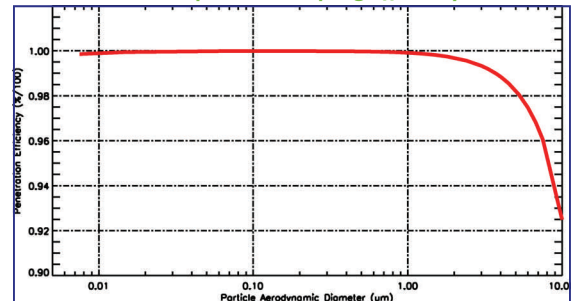
## Key Features:

- Fully automated, hands-off operation
- Transmission efficiency > 90% for particle aerodynamic diameters < 10µm
- Wind tunnel tested and validated
- Inlet manifold designed customized for application including sampling pickoffs
- Custom or off-the-shelf mounting solutions account for aircraft angle attack
- Aerodynamic, twin-diffuser prevents turbulent boundary layer separation
- Removal of diffuser turbulent boundary layer through passive pumping
- Low power blower to draw and actively control 150 lpm sample flow (up to 80 lpm of air flow for instruments)
- Anti-icing system
- Pitot tube for airspeed measurements and isokinetic flow control
- Flow rate, pressure and temperature measurements of sample flow
- Integrated data system to control operation, record all parameters and provide 1 Hz serial output data stream
- Control electronics (5U), keyboard, mouse & monitor (1U) conveniently packaged into two rack mountable enclosures



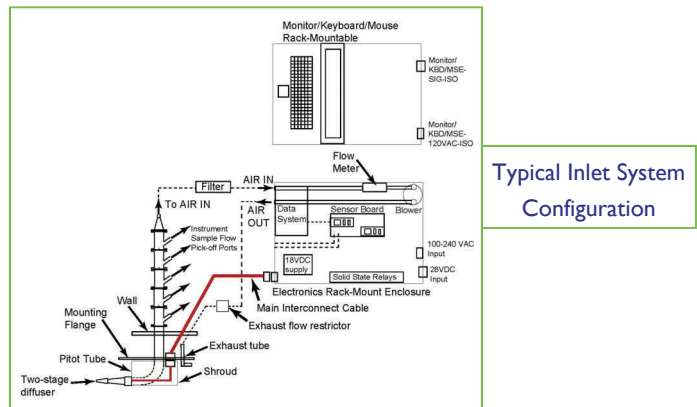
Inlet control software

## Size-dependent sampling efficiency



## Technical Specifications

<b>Total Flow:</b>	150 lpm
<b>Maximum Sample Flow:</b>	80 lpm
<b>Rackmount Size:</b>	8.75" h x 19" w x 24" d
<b>Data System Power:</b>	100 Watts @ 110 or 230 VAC
<b>Anti-Icing Heater Power:</b>	420 Watts @ 28 VDC
<b>Weight:</b>	80 lbs/36 kg
<b>Operating Temperature Range:</b>	-40°C to +45°C
<b>Operating Pressure Range:</b>	0.2 to 1 atm



Typical Inlet System Configuration



For more information on Inlet Systems, please visit our website at [www.brechtel.com/aerosol.html](http://www.brechtel.com/aerosol.html) or contact our sales department by email at [sales@brechtel.com](mailto:sales@brechtel.com) or 510-732-9723