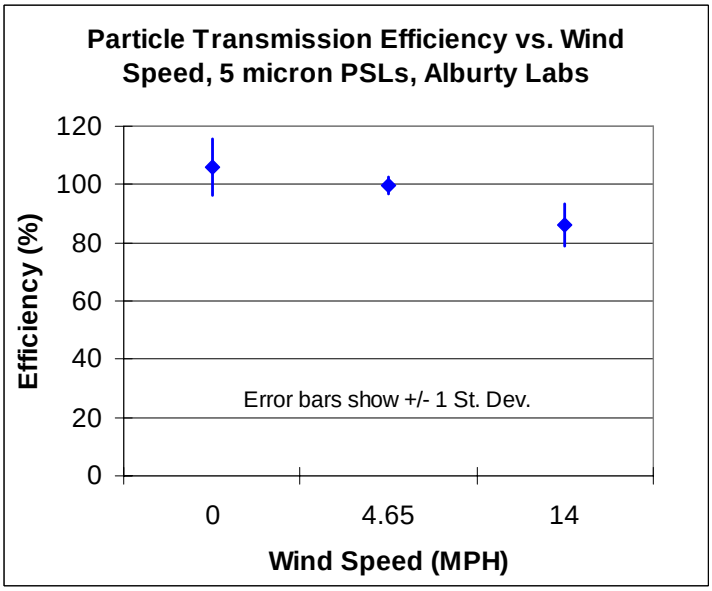
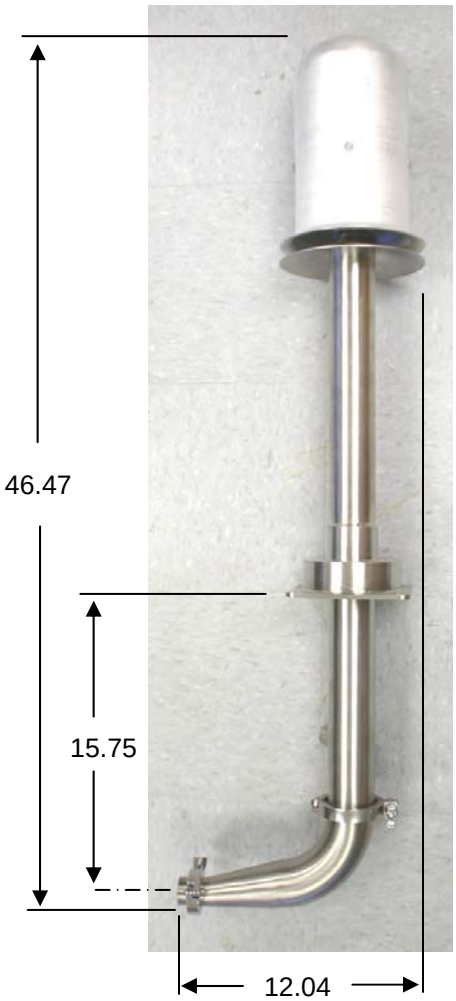
Uni-Directional All Weather Sampler Inlet Specifications

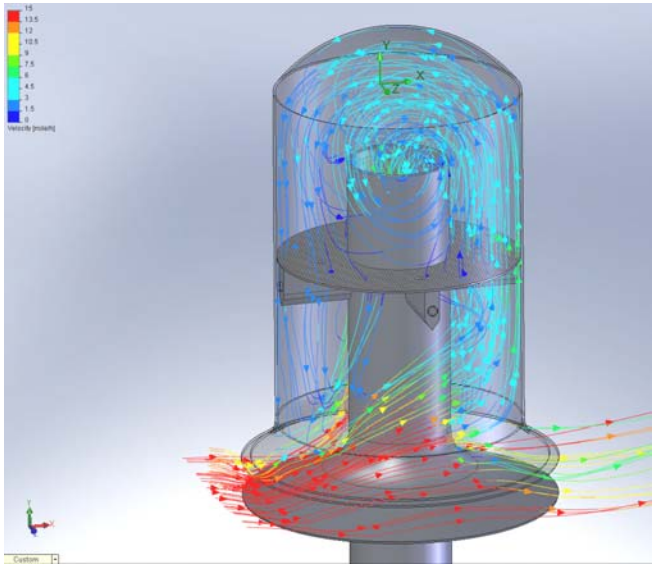
This rugged all-weather inlet has been designed using CFD modeling for efficient capture of particles up to 30 microns over a range of wind speeds while virtually excluding all particles larger than 50 microns. It excludes rain, birds and insects while producing a very small pressure drop on the sampler. Test Data shown below is from wind tunnel testing at Alburty Labs and the inlet's performance has been validated at the U.S. Army's Edgewood Chemical Biological Center. The inlet is constructed using stainless steel sanitary flange fittings and clamps, allowing for a variety of different configurations. Alternate mounting and sampler connection fittings are also available.

Inlet Specifications	
Designed Flow Rate	400 LPM
Calculated Inlet efficiency, 0 MPH Wind Speed	5 microns: 98.1% 30 microns: 91.7%
Excluded particle size	>50 microns
Construction Materials	Stainless Steel, Aluminum, Viton gaskets
Weight (configuration shown)	17 Lbs
Sampler connection (others available)	1.065 inch I.D. male port, threaded 1½ -18 UNEF
Size	See Drawing
Pressure Drop	< 0.1 in. H_2O





Inlet General Dimensions



An example of the Computational Fluid Dynamics modeling used to design the inlet: particle velocities when subject to a 15 MPH wind.

Sampler Inlet Assembly