**Aggressive Gas Mass Flow Meter**

**One Instrument... Over 100 Gases**

- Flexibility of 130+ selectable on-board gases
- Lifetime Warranty with calibrations
- Fast 10 millisecond response
- Pinpoint accuracy at 0.2% Full Scale and 0.8% Reading
- 100-1 Turndown Ratio allows lower accurate flow readings
- Flows from 0.5 SCCM to 3000 SLPM Full Scale
- Compatible with FlowVisionSC download on Windows
- No additional rack mount power or display supplies needed
- All units come with RS-232 and all Analog Communication
- Multiple unit control made easy with the BB9 Breakout Box

**Why we Stand Out**

**Technical Information**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>0.8% of reading / 0.2% of Full Scale</td>
</tr>
<tr>
<td>Repeatability</td>
<td>0.2% at Full Scale</td>
</tr>
<tr>
<td>Operating Range</td>
<td>1-100% Measure and Control</td>
</tr>
<tr>
<td>Response Time</td>
<td>10 Milliseconds</td>
</tr>
<tr>
<td>Standard Conditions</td>
<td>25°C and 14.696 PSIA (STP)</td>
</tr>
<tr>
<td>Operating Temp</td>
<td>-10°C to +50°C</td>
</tr>
<tr>
<td>Humidity Range</td>
<td>Non-Condensing (0-100%)</td>
</tr>
<tr>
<td>Flow Rate</td>
<td>128% Measurable Full Scale</td>
</tr>
<tr>
<td>Maximum Pressure</td>
<td>145 PSIG</td>
</tr>
<tr>
<td>Digital Options</td>
<td>RS 232; RS 485; Modbus; PROFIBUS</td>
</tr>
<tr>
<td>Analog Options</td>
<td>0-5 Vdc; 1-5 Vdc; 0-10 Vdc; 4-20 mA</td>
</tr>
<tr>
<td>Electrical Connections</td>
<td>8 Pin, 9 Pin, 15 Pin, 6 Pin Industrial</td>
</tr>
</tbody>
</table>

**Common Applications**

- Research and Development
- Sputtering
- Thin Film Deposition
- Chemical Vapor Deposition
- Plasma Production
- Replacement for Valve Control
- Vacuum Venting and Gassing
- Fuel Cell Systems
- Nitrogen Blanketing
- Shaping Air in Paint Booths

**Apex MFM in a Glance**

The Apex Aggressive Gas Mass Flow Meters are laminar flow meters that use differential pressure measurements within the known volume to determine flow rates. The Aggressive Gas Meters are compatible with Ammonia, Hydrogen Sulfide, Nitric Oxide, Nitrogen Triflouride, Propylene, Sulfur Dioxide, and Chlorine Gas along with the 110 on board gases offered with the standard Apex MFM.

See page XVI for all the potential gases you can flow with 1 aggressive gas unit.

**Accessories & Additions**

- Local Set Point Module
- Remote Digital Display
- Assortment of Connecting Cables
- Portable Batteries and Power Cords
- FlowVision
- Add Gases: Nitrogen Dioxide, Silane, Trans-Butene, and Nitrogen Dioxide
- Totalizer
- Additional Fittings
- Orifice Sizing
- Gas Blend Calibrations
- Bi-Directional Flow Calibration
- 0.4% of Reading, High Accuracy Option