



The **TRIBO.dsp U3200** is an advanced and economical particulate detector for dust collector compliance, maintenance, and process applications. The U3200 is designed to monitor fabric filter baghouses, cartridge filters, cyclones, and all types of dust collection equipment. For dry solids flow applications, the U3200 can detect flow/no flow and even high or low flow conditions in pneumatic conveying, injection, or gravity fed process flow applications.

Features include self-checking electronics with a numerical LED display showing the real-time signal level, and easy-to-set alarm indicators. When installed, the U3200 monitors the process under normal operating conditions to establish a baseline. The U3200 detects changing signal levels relative to the normal operational baseline. Dual relays allow for two levels of warnings or indications which can be set for either high or low threshold exceedance, depending on the application.



**TRIBO.dsp U3200 Features:**

- Economical cost, superior technology
- Advanced detector for dust emissions and process flow applications
- Easily selectable alarm threshold level and time delay
- Two independent SPDT relay contacts for alarm indications with selectable fail-safe mode
- No manual zero check required
- Industrially hardened, noise resistant design; can operate on an ESP and other challenging applications

**About TRIBO.dsp Technology**

The **TRIBO.dsp U3000** series includes an advanced operating platform, which incorporates more than a quarter century of Auburn’s electrostatic particulate measurement experience. The **TRIBO.dsp** series unifies DC impaction (triboelectric) *and* AC (induction) flow signals for superior accuracy, reliability, and repeatability. This proprietary platform has proven to be more stable and accurate than AC-only, induction, and electrodynamic detectors.

**TRIBO.dsp Technology**

- Unified AC/DC signal processing is more accurate
- Superior signal filtering eliminates electrical noise interference for stable measurement
- Widest dynamic range and highest resolution for more process applications

**Competition’s Technology**

- Isolated AC or DC only signal processing is less accurate
- Inferior signal filtering creates instability due to factory floor electrical noise
- Limited dynamic range and resolution is unsuitable for many process applications



U3200 ELECTRONICS SPECIFICATIONS	
Electronic Enclosure	Polycarbonate NEMA 4X with 3 x 1/2" conduit openings
Power	85 - 260VAC standard (10 - 32 VDC optional)
Power Consumption	3 Watts maximum load
Operating Temperature	-35° - 185° F (-31° - 85° C)
Humidity Range	0 - 95% relative; non-condensing
Hazardous Rating	Designed intrinsically safe
Dynamic Range	1 pA - 10,000,000 pA - standard 0.1 pA - 1,000,000 pA - optional
Resolution/Precision (pA)	1 pA standard 0.1 pA optional
Sensitivity Range	Typical .0005gr/dscf (1mg/m <sup>3</sup> ) concentration detectable
Output	(2) SPDT Relays, 5A @ 30VDC or 250VAC Independent alarm set-points, high or low (0 - 100%) Independent alarm delays (0 - 600 sec)
U3200 SENSOR SPECIFICATIONS	
Remote Sensor Enclosure	NEMA 4
Sensor Probe	Probe - 316 stainless steel (standard); other materials available
Wetted Metal Parts	All others - 303 stainless steel minimum grade
Insulation	Extended High Performance (PFA)- standard, -40° - 475°F (-40° - 240°C) Ceramic (High Temperature or Pressure) -40° - 1000°F (-40° - 540°C) Consult factory or your local representative for proper recommendations
Probe Insertion Length	Standard probe lengths: 3, 6, 12, 18, 30, 36 inch (7.6, 15.2, 30.5, 45.7, 76.2, 91.4 cm) (specify to reach approximately mid-duct or further)
Installation	Weld the supplied fitting into the pipe or duct and insert sensor
Remote Sensor Cable	Special coaxial cable; temperature range: -60° - 400°F (-50° - 200°C) Maximum distance: contact factory
Wiring Connections	3/4 inch NPT female conduit fitting
Pipe/Duct Connections	1/2 inch NPT male fitting or 1" quick release ferrule
Options	Wire rope sensors; In-line ring sensors; Venturi (fugitive) dust sensors

We are confident we can satisfy your monitoring application or technical support needs. For additional information or to request a quote, please contact us or visit [www.auburnsys.com](http://www.auburnsys.com).

**Emissions Monitoring**

- Bag Leak Detection
- Dust Collector Maintenance
- Product Loss Prevention
- Maintenance Reduction
- Equipment Protection

**Process Applications**

- Process Optimization
- Particle Flow Velocity
- Gravity Feed
- Injection Flow
- Material Flow Control