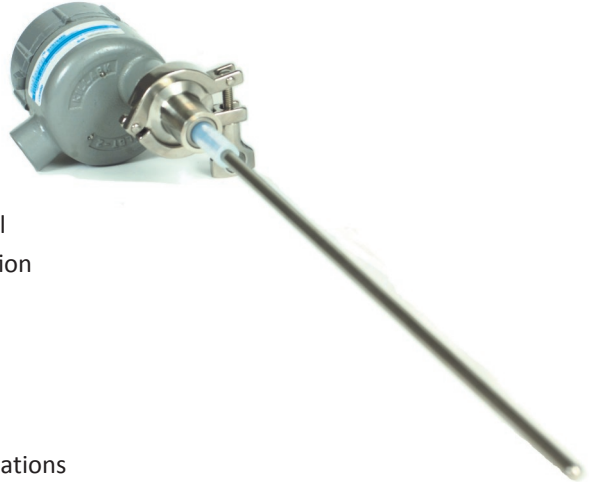


The **TRIBO.dsp U3200 Integral** model is an advanced and economical particulate detector for dust collector compliance, maintenance, and process applications. The U3200 is designed to monitor fabric filter baghouses, cartridge filters, cyclones, and all types of dust collection equipment. For dry solids 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.

### Applications for the U3200 Integral

- Emission Monitoring
- Bag Leak Detection
- Dust Collector Maintenance
- Product Loss Prevention
- Equipment Protection
- Cyclone Overflow
- Process Monitoring
- Process Optimization
- Gravity Feed
- Injection Flow
- Material Flow Control
- Flow/No Flow Detection



### Features of the U3200 Integral

- Economical cost, superior technology
- Advanced detector for dust emissions and process flow applications
- Easily selectable alarm threshold level and time delay
- One SPDT relay contact for alarm indications with selectable fail-safe mode
- No manual zero check required

Features include self-checking electronics with a numerical LED display showing the real-time signal level, and easy-to-set alarm indicators. Integral design allows for simplified installation for basic dust collection equipment applications. When installed, the U3200 monitors the process under normal operating conditions to establish a baseline. The U3200 detects changing signal levels relative to established baseline. SPDT relay for controlling an alarm light or horn and can be used to control other equipment (i.e. shut down the fan).

### TRIBO.dsp U3000 Series

Auburn's TRIBO.dsp U3000 series of electrostatic/triboelectric bag leak detectors, emission monitors, and solids flow monitors effectively measure dust emissions and dry solids flow from a wide variety of industrial processes.

### TRIBO.dsp's Working Principal

As dust particles collide with, or closely pass by a probe, charge transfers occur. TRIBO.dsp series products detect the signal created by the changes in particulate concentration, as in the onset of a bag leak or an increase or decrease in flow. Unlike monitors that use only the DC or only the AC induction signals, thereby using only a portion of the complete electrostatic signal, TRIBO.dsp unified 3000 series combines the benefits of each method, providing the user with a superior reliable and repeatable signal, with electrical interference resistance - even in harsh industrial environments. They can activate operational functions such as alarms and relays or can generate continuous 4-20 mA or digital signals for trending and recording purposes.

# TRIBO.dsp U3200<sup>TM</sup> Integral

## ELECTRONICS SPECIFICATIONS

<b>Electronic Enclosure</b>	Cast aluminum, electrostatically applied powder coating, equivalent NEMA 4X
<b>Power</b>	85 - 260VAC standard (10 - 32 VDC optional)
<b>Power Consumption</b>	3 Watts maximum load
<b>Operating Temperature</b>	-35° - 185° F (-31° - 85° C)
<b>Humidity Range</b>	0 - 95% relative; non-condensing
<b>Dynamic Range</b>	1 pA - 10,000,000 pA - standard 0.1 pA - 1,000,000 pA – optional
<b>Resolution/Precision (pA)</b>	1 pA standard 0.1 pA optional
<b>Sensitivity Range</b>	Concentrations as low as .005mg/m <sup>3</sup> have been detected
<b>Output</b>	(1) SPDT Relay, 5A @ 30VDC or 250VAC Alarm set-point, high or low (0 - 100%) Alarm delay (0 - 600 sec)
<b>Approvals</b>	CE Approved

## SENSOR SPECIFICATIONS

<b>Sensor Probe</b>	Integral One Piece Design - 316 stainless steel (standard); other materials available
<b>Wetted Metal Parts</b>	All others - 303 stainless steel minimum grade
<b>Insulation</b>	Extended High Performance (PFA)- standard, -40° - 450°F (-40° - 232°C) Consult factory or your local representative for proper recommendations
<b>Probe Insertion Length</b>	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)
<b>Installation</b>	Weld the supplied fitting into the pipe or duct and insert sensor
<b>Wiring Connections</b>	¾ inch NPT female conduit fitting
<b>Pipe/Duct Connections</b>	½ inch NPT male fitting or 1" quick release ferrule (other options available)
<b>Options</b>	Wire-Rope Sensor; In-Line Ring Sensor; Ambient Fugitive Dust Sensor

