

TRIBO.dsp U3600 is an innovative, self checking, particulate monitor ideal for dust collector compliance and maintenance applications. The advanced *unified* DC/AC design, with flexible scaling and alarm features, allows the U3600 to be used for process flow applications.

The U3600 provides a 4-20mA output and two independent SPDT relay contacts for alarm purposes. The easy-to-read, four color screen for real-time emission levels and alarm status is continuously on display. An optional digital output (Ethernet/IP, Modbus TCP) is available for direct connection to plant network systems (PLC's etc.) or bag leak detection systems managed by AUBURN.vision software.



Applications for the U3600

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



Easy-to-Read Screen

TRIBO.dsp U3600 Features:

- Wide dynamic range, used to monitor flow or emissions applications
- Continuous 4-20 mA output
- Two (2) independent relays for alarm purposes
- Signal can be calibrated to display mg/m^3
- No zero or drift adjustments required
- Automatic probe contamination check
- Password protection


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 U3600™

| ELECTRONICS SPECIFICATIONS | |
|----------------------------------|---|
| Electronic Enclosure | Polycarbonate NEMA 4X with 3/4" conduit fittings |
| Power | 85 - 260VAC standard (12 VDC or 24 VDC optional) |
| Power Consumption | 5 Watts maximum load |
| Operating Temperature | -22° - 185° F (-30° - 85° C) |
| Humidity Range | 0 - 95% relative; non-condensing |
| 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 | Concentrations as low as .005mg/m ³ have been detected |
| Output | 2 SPDT relay 5 amp @ 28 VDC or 250 VAC 100VA <ul style="list-style-type: none"> • 2 independent alarm set points, high or low (0 -100%) • 2 independent alarm time delays (0 - 999 sec.) Isolated 4-20mA compatible loop or self-powered output, with user selectable scaling Industrial Ethernet/IP and Modbus TCP optional |
| Display | 3"x3" 4-color LCD, 8 decade log or 0 - 100% analog gauge, 6-digit display, dual alarm indicators |
| Other Features | Password protection for user settings, user selectable calibrated (mg/m ³) mode Automatic contamination check, Unlimited scaling options |
| Approvals | CE Approved  |
| SENSOR SPECIFICATIONS | |
| Remote Sensor Enclosure | Cast aluminum, electrostatically applied powder coating, equivalent NEMA 4X |
| 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° - 450°F (-40° - 232°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 | ¾ inch NPT female conduit fitting |
| Pipe/Duct Connections | ½ inch NPT male fitting or 1" quick release ferrule (other options available) |
| Options | Wire Rope Sensor; In-Line Ring Sensor; Ambient Fugitive Dust Sensor |

