

S300 SERIES DUST MONITORS

- S301 - Filter Bag Leak Detection**
- S303 - Trend Monitoring**
- S304 - Emission Monitoring**
- S305 - Emission Monitoring**
- E-spy - Trend Monitoring**

Common Features

- Automatic Range setup
- No manual adjustment required
- Automatic drift compensation
- Color particles will not affect the reading
- No optical windows to be kept clean
- Buildup of dust on the probe will not affect monitoring
- No alignment required
- Vibration has no effect on reading
- Models available for ATEX zone 20

Product Specific Features

| • Standard ◦ Optional | S301 | S303 | S304 | S305 |
|--|------|------|------|------|
| 4 - 20 mA signal output | | • | • | • |
| Remote Setup & Configuration | | ◦ | ◦ | ◦ |
| Self zero check | | | | • |
| Span check | | | | • |
| Filter Bag Leak Detection. On-Off systems. Pneumatic Transport | • | • | • | • |
| Trend Monitoring. Filter performance | | • | • | • |
| Filter performance. Particulate emissions | | • | • | • |
| Stack Monitoring. Can be calibrated to mg/cu. m | | | • | • |
| Serial Communication | | | • | • |

Technical Specifications

| Application : Stack Monitoring | |
|--------------------------------------|--|
| Measurement Objects | Solid particles in gas flow |
| Particle Size | 0.3 micrometer or larger |
| Measurement Range | Approx 0.1mg/cu. m to 1kg/ cu. m |
| Measurement Principle | Inductive Electricity |
| Power Supply | 15 VAC, 230 VAC or 24 VDC |
| Power Consumption | DC model Max 3W, AC model Max 8W |
| Wiring Connections | Power Supply: DIN PG1 Cable gland Output Signals: DIN Pg11 Cable gland |
| Output Signals (Dependant on models) | Isolated 4...20mA Relay 5A, 24V AC/DC Serial Communication |
| Range Set Up | Normal measuring range: Automatic, Average measured during setup Extended measuring range: User Selectable (optional) |
| Relay Alarm Options | Alarm Level: Automatic, User selectable fixed ranges Software alarm option: configurable |
| Offset Trim | Automatic drift compensation |
| Analog Damping Time Constant | 10 - 300 s |
| Output Signals | 2 solid state relays (170mA/200mA if only one output) |
| PROCESS CONDITIONS | |
| Temperature | 300°C (standard), 700°C (high temperature) |
| Pressure | Max 2 bar |
| Gas Velocity | Min 4 m/s |
| Humidity | 95% RH or less (non-condensing) |
| Input Surge Voltage | Max 100 V |
| AMBIENT CONDITIONS | |
| Ambient Temperature | -20....+45°C and 60°C for 24VDC |
| Humidity | 95% RH (non-condensing) |
| Vibration | 5 m/sq. s or less |
| MATERIALS | |
| Sensor Rod | Stainless Steel (AISI316) |
| Enclosure / Casing | Aluminum alloy |
| Insulation of Sensor | Peek |
| Weight | 2.3 kg |

Filter Bag Leak Detection



Trend Monitoring



Emission Monitoring



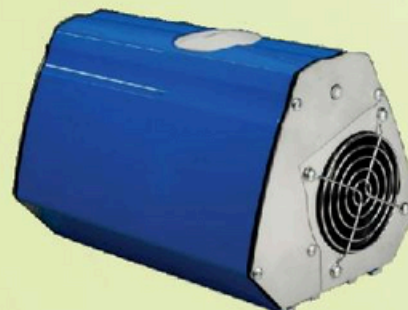
PROCESS MONITORING



| | |
|--|---|
| Application : Broken Bag Detection / Bulk Solids & Pneumatic Transport for flow / No flow detection | |
| Measurement Objects | Solid particles in gas flow |
| Particle Size | 0.3µm or larger |
| Measurement Range | From 0.1mg/m ³ |
| Measurement Principle | Inductive Electricity |
| Protection on Category | IP 65 |
| Power Supply | 13 - 24 VDC |
| Power Consumption | 3 W |
| Cable Connection | 2 meter of cable, 4 pair screened |
| Installation | ½ " thread |
| Output Signal | 2 solid state relays (170mA/200mA if only one output) |
| PROCESS CONDITIONS | |
| Temperature | Max 250°C |
| Pressure | 200 kPa |
| Gas Velocity | Min 4m/s |
| Humidity | 95% RH (non-condensing) |
| AMBIENT CONDITIONS | |
| Ambient Temperature | -20....+60°C |
| Humidity | 95% RH (non-condensing) |
| MATERIALS | |
| Sensor Rod | Stainless Steel (230) |
| Enclosure / Casting | Aluminum |
| Insulation of Sensor | PEEK |
| Weight | Approx 0.6 kg |

Options*: Model available for ATEX 22 zones

AMBIENT AIR MONITORING



| | |
|---|---|
| Application : Ambient Air Monitors in Open Yards | |
| Measurement Objects | Solid particles in ambient air |
| Particle Size | 0.3µm or larger |
| Measurement Principle | Inductive Electricity |
| Averaging Time | 0s - 1h 30 min |
| Output Signals | 2 solid state relays Isolated 4...20mA Serial communication |
| Power Supply | 24 VDC |
| Ambient Temperature | -20....+60°C |
| Enclosure / Casting | Aluminum Stainless steel |
| Cable Connection | 5 meter of cable |
| Weight | 3 kg |

Typical Applications

- Cement Manufacture
- Chemical Processing
- Metals Industry
- Foundries
- Pharmaceutical Industry
- Mineral Drying
- Fertilizers
- Wood Processing
- Food and Tobacco
- Rubber Compounding
- Animal and Feed Processing
- Power Plants
- Waste Incinerators
- Pulp and Paper