

# S300 Series Dust Monitors

- S304 – Emission Monitor
- S305 – Stack Monitor



## NEW DUST MONITORS – WITH A DIFFERENCE!

### S304 – New Emission Monitor

- Linear monitor for dust emission monitoring
- Automatic range setup
- Automatic drift compensation
- Can be calibrated to  $\text{mg}/\text{m}^3$  (dust concentration)
- Remote configuration using RS422 or RS485
- Remote data collection via Sintrol's data logging software

### S305 – New Stack Monitor with TÜV Certificate

- Linear monitor for stack-monitoring applications
- Automatic range setup
- Automatic drift compensation
- Can be calibrated to  $\text{mg}/\text{m}^3$  (dust concentration)
- Remote configuration and data collection using RS422 or RS485
- TÜV Certificate: BlmSchV 13, BlmSchV 17, BlmSchV 27, BlmSchV 30 and TA Luft 2002
- Self Zero check and self Span check
- PIN code protection



# S300 Series Dust Monitors

## TECHNICAL SPECIFICATIONS

<b>Measurement objects:</b>	Solid particles in a gas flow
Particle size:	0.3 micron or larger
Measurement range:	approx. 0.1 mg/m <sup>3</sup> to 1 kg/m <sup>3</sup>
<b>Process Conditions:</b>	
Temperature:	300°C
Pressure:	Max. 200 kPa
Gas velocity:	Min. 4 m/s
Humidity:	95 % RH or less (non-condensing)
Input surge voltage:	Max. 100 V
<b>Measurement principle:</b>	Friction / electrostatic detection
<b>Damping time constant:</b>	0 to 300 seconds
<b>Output signals:</b>	isolated 4-20 mA relay 5 A, 24 VAC or DC
<b>Ambient conditions:</b>	
Temperature:	-20°C to +45°C 60°C for 24 VDC
Humidity:	95% RH (non-condensing)
Vibration:	5 m/s <sup>2</sup> or less
<b>Materials:</b>	
Sensor rod:	stainless steel
Insulation of sensor:	PEEK
Enclosure /casing:	aluminium
<b>Power Supply:</b>	115 VAC / 230 VAC / 24 VDC
<b>Power consumption:</b>	3 W for DC models 8 W for AC models
<b>Wiring connections:</b>	DIN PG11 cable gland for power cables DIN PG11 cable gland for output signals
<b>Weight:</b>	2.3 kg
<b>Range setup:</b>	
Normal measuring range:	– automatic, based on average measured dust flow during setup procedure
Extended measuring range:	– user selectable
<b>Relay alarm options:</b>	
Alarm level:	– automatic, set at factory (based on average measured dust flow) or user selectable
Software alarm option:	Configurable via Dustlog data logging software
<b>Offset trim:</b>	automatic

A reliable and accurate dust monitoring system is necessary to satisfy the continuous monitoring requirements of the environmental regulatory authorities and to ensure compliance with increasingly stringent standards imposed for particulate emissions to the atmosphere. Sintrol's S304 and S305 dust monitors are proving an ideal solution for stack-monitoring requirements of a variety of applications including coal-fired power plants and incinerators. TÜV certification includes: 13 BlmSchV, 17 BlmSchV, 27 BlmSchV, 30 BlmSchV and TA Luft 2002.

## Ordering codes for S304 and S305 monitors

<b>Temperature (°C)</b>	
1	
2	
3	300
<b>Pressure</b>	
L	< 2 bar
H	> 2 bar
<b>Voltage</b>	
1	230 VAC
2	115 VAC
3	24 VDC
<b>Air purge</b>	
N	without air purge
Y	with air purge
<b>Probe length (mm)</b>	
1	250
5	500
7	750
9	1000
<b>Options</b>	
R	Remote display
<b>Process connection</b>	
S	Standard
Q	Quick clamp
F	Flange
X	X
X	X
X	X
X	X
X	X
X	X
X	X

**E.g. S304-3L1Y5RS: (300°C, < 2 bar, 230 VAC, with air purge, with remote display, 500 mm probe, standard process connection)**