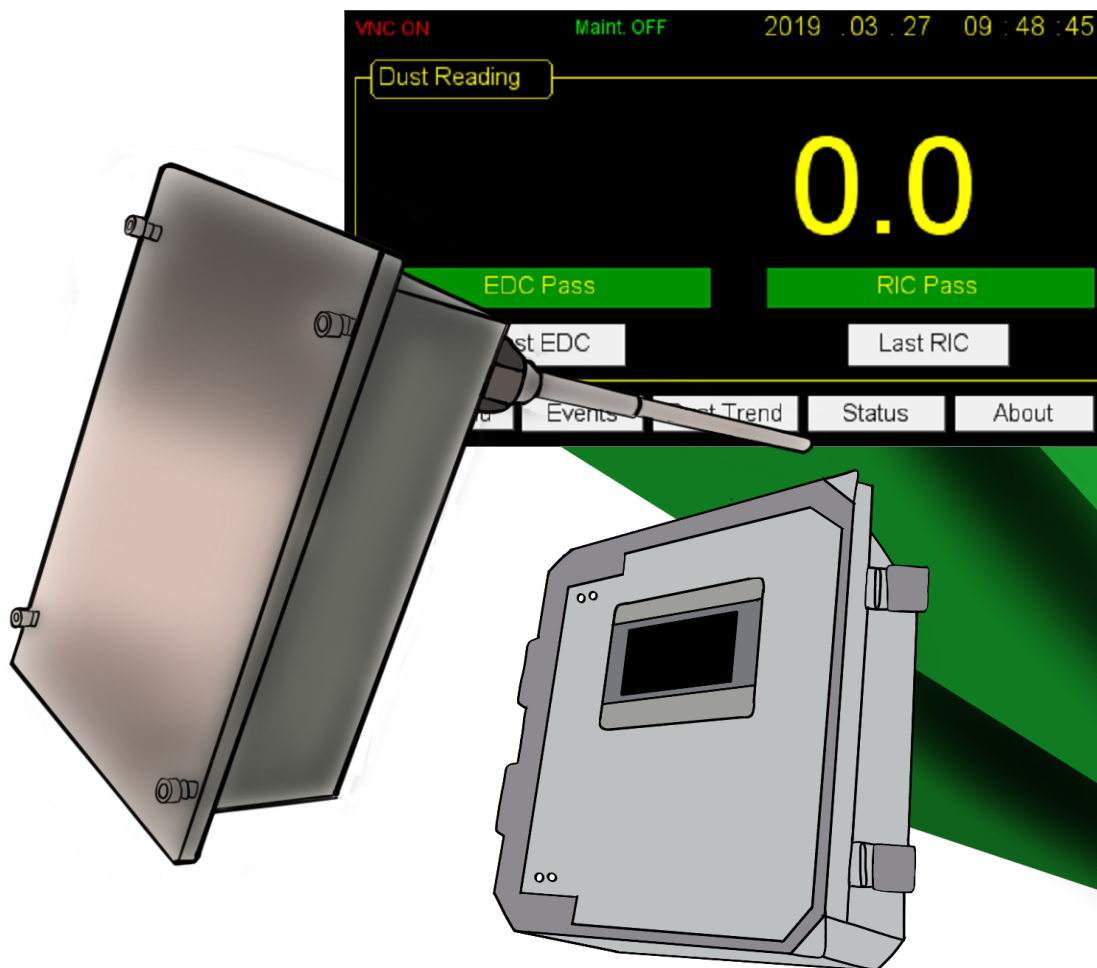




Dust Monitoring Systems

**IF THE QUESTION IS PARTICULATE,
THE ANSWER IS B3 SYSTEMS.**



Baghouse
Leak
Detector

Dust
Monitoring

PM
Monitoring

Modbus
RTU/TCP

Ethernet/IP

Built-in
Averaging &
Alarming

Automated
Zero/Span,
Linearity & Rod
Isolation Checks

MEETS ALL EPA MACT REQUIREMENTS

INTEGRATES DIRECTLY INTO PLANT PLC/DCS

COMPLETELY DIGITAL DUST READINGS

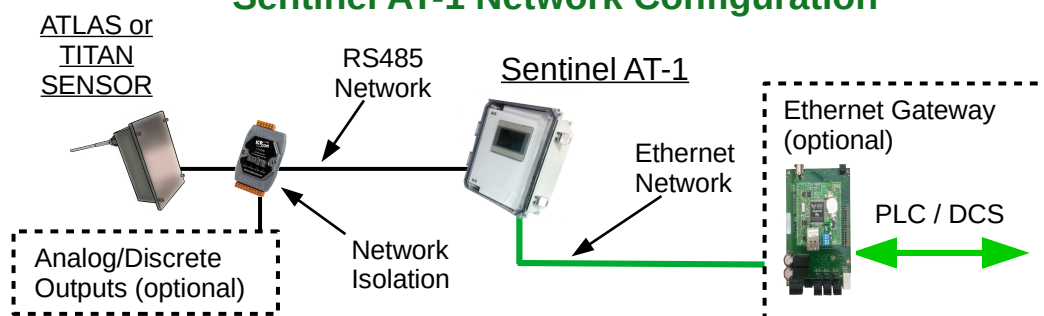
PATENTED ROD ISOLATION CHECK

**ROLLING AVERAGES AND INSTANTANEOUS DUST WITH
ALARMING FUNCTIONS ON ALL DUST CHANNELS**

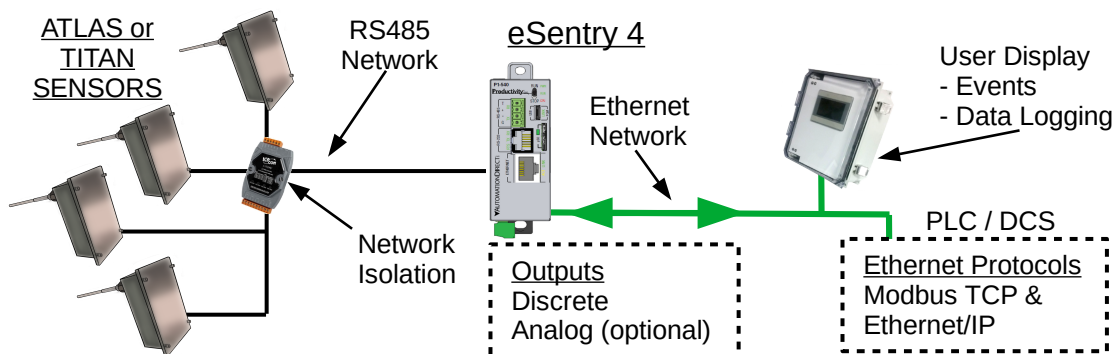
Dust Monitoring Systems

System Configurations

Sentinel AT-1 Network Configuration



eSentry 4 Network Configuration



Controller and Interface Features

	ESentry 4 STD	ESentry 4 XL	Sentinel 1 STD	Sentinel 1 XL
Display	4.3"	7"	4.3"	7"
Sensors	Up to 4	Up to 4	1	1
Data Logging	Y	Y	Y	Y
Outputs				
Analog Outputs	-o-	-o-	-o-	-o-
Alarm Relays	Y	Y	-o-	-o-
End User Communication				
RS485	---	---	---	---
Ethernet	Y	Y	Y	Y
User Communication Protocols				
Modbus TCP	Server	Server	-o-	-o-
Ethernet/IP	Adapter	Adapter	-o-	-o-
o-Optional Feature/Function, may require additional equipment/hardware				

Dynamic Induction - Dust Monitors

Sensor Features

	Scout	Atlas	Titan
Analog Output	4-20 mA and 0-10 v dc	-a-	-a-
Alarm Relay	Y	-a-	-a-
RS485	---	1	2
Ethernet	---	---	1
Onboard Communication Protocols	---	Modbus RTU	Modbus RTU & TCP
Dust – Instant	Choose One	Y	Y
Dust – Rolling Averages Channels		1	3
High Dust Alarms	---	1	4
Alarm Delay	---	Y	Y
Probe Type	Local – Standard Remote – Optional		
Detection Resolution	< 0.01 mg/m ³		
Enclosure	NEMA 4X		
Weight	7.0 lbs (3.2 kg) (without the rod)		
Dimensions (without rod)	7" x 11" x 5" (W x H x D) 178mm x 280mm x 127mm		
Ambient Temperature	-40 C to +70 C (-40 F to 158 F)		
Power Supply	24 VDC		
Power Consumption	Less than 5 Watts		
Process Temperature	Default 200 C (392 F) Optionally up to 1600 F (871 C)		
Process Pressure	Default 3000 psi (20684 kPa)		
Process Humidity	Max 95% RH (non-condensing)		
Optional Extreme Applications			
High Vibration	Please Call		
High Temperature	Please Call		
Advanced Features & Functions			
Automated Rod Isolation Check	---	-o-	-o-
Automated Zero/Span check	---	-o-	-o-
Automated Linearity Check	---	-o-	-o-
Real-Time Clock	---	---	Y
s-Standard o-Optional Feature/Function a-Optional, additional equipment required			

Dust Monitoring Systems

CONTROLLER AND INTERFACE OVERVIEW

B3 Systems has developed controllers and user interfaces to cover a wider ranges of needs and applications. Whether your needs range from process control to compliance or stand-alone systems to network integration we have systems that fit and put the information into the hands of the people who need it most.

INDUSTRIES WE WORK WITH:

Cement, Power, Waste Incineration, Food Industry,
Pharmaceutical, Foundries, Chemical Processing, Fertilizers,
Tobacco, Animal Food Processing, Metallurgical, Wood
Processing

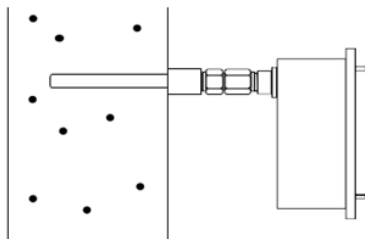
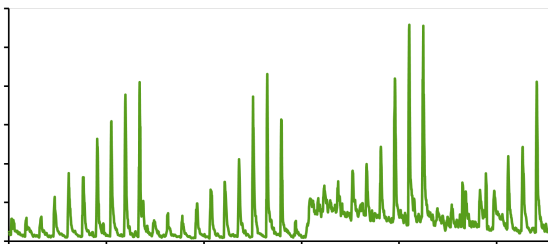
OUR APPROACH

B3 Systems approaches the dust monitoring market with a background as a systems' integrator. Therefore our products mirror that experience by trying to provide you with the tools and options to get the dust readings where they are actually needed.

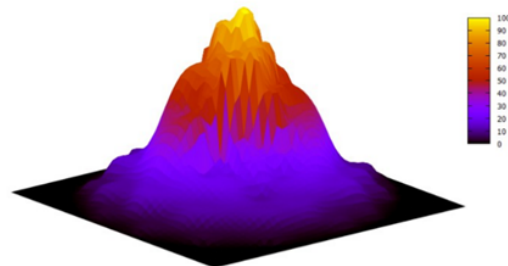
From robust industrial Ethernet communications to analog outputs. We can provide the system you need.

OUR TECHNOLOGY

No matter what your final system configuration is, it all starts with the dust. Dynamic Induction™ is a proven technique that provides the most stable and reliable dust detection on the market. If you are not sure, then contact us for a demonstration.



Stack View of Sensor Installation



Signal Response looking directly at the end of the rod.
Data collected from internal Stratification Testing (recorded, 2019).

Represents ability to detect particles ~12" to 18" either side of the rod, providing a larger and more representative monitoring zone than single-point or cross-stack technologies.

CUSTOM APPLICATIONS WELCOMED

**ALL CONTROLLER AND INTERFACES ARE DESIGNED TO WORK IN TANDEM WITH
BOTH ATLAS AND TITAN DUST MONITORS**