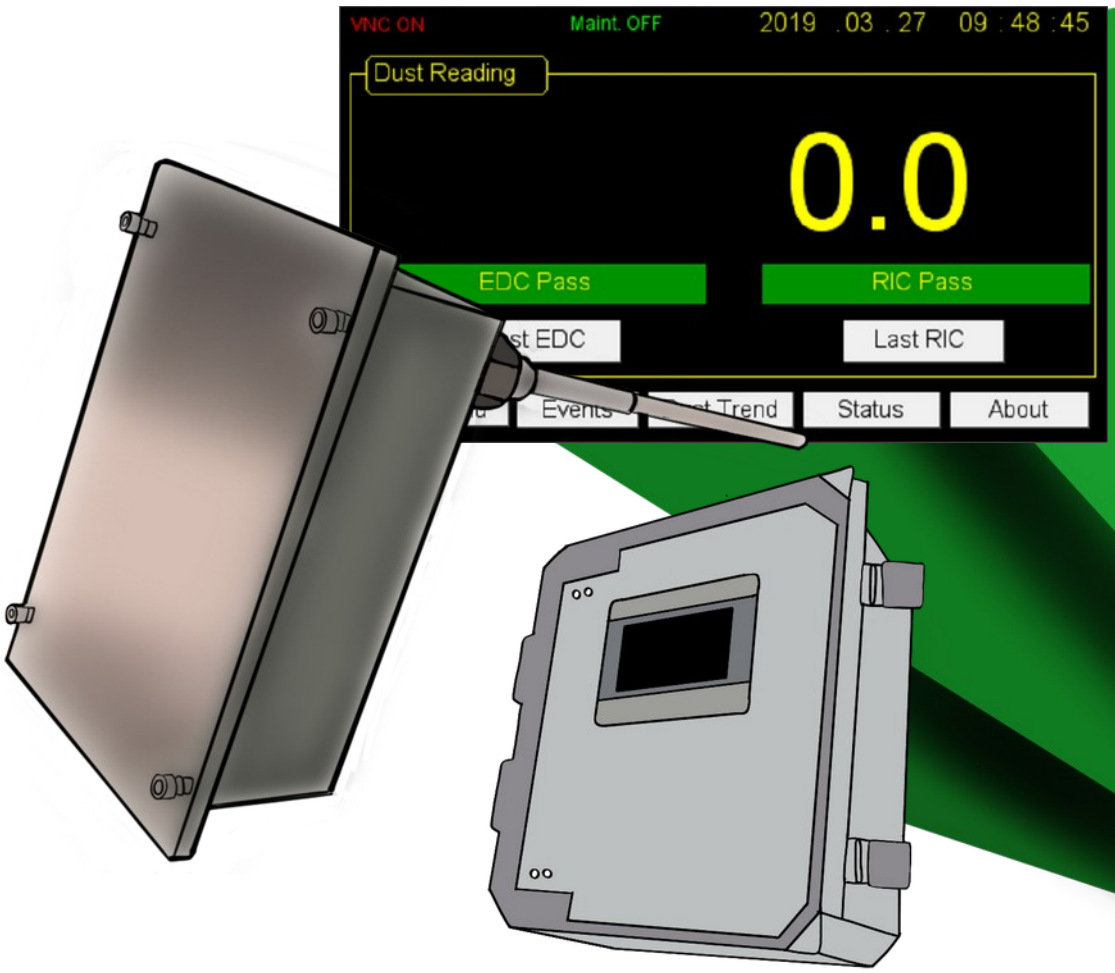
Dust Monitoring Systems

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

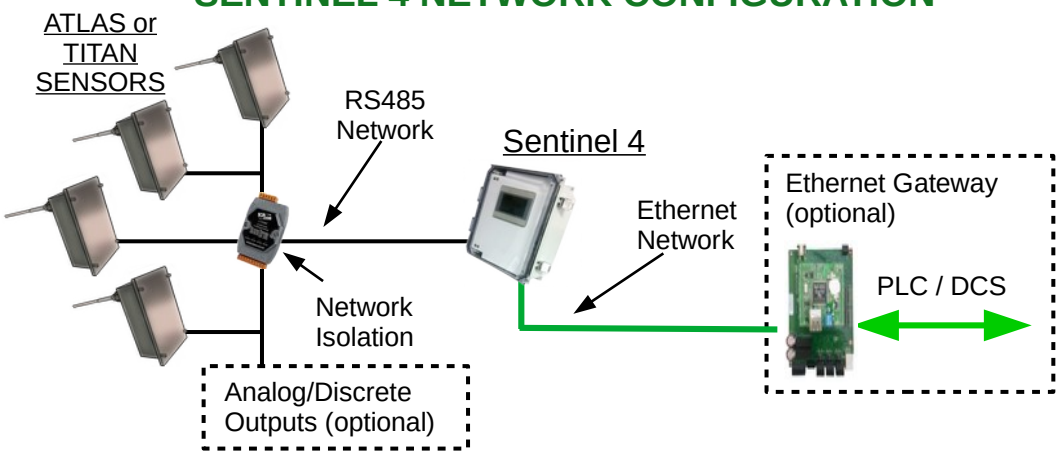
PATENTED ROD ISOLATION CHECK

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

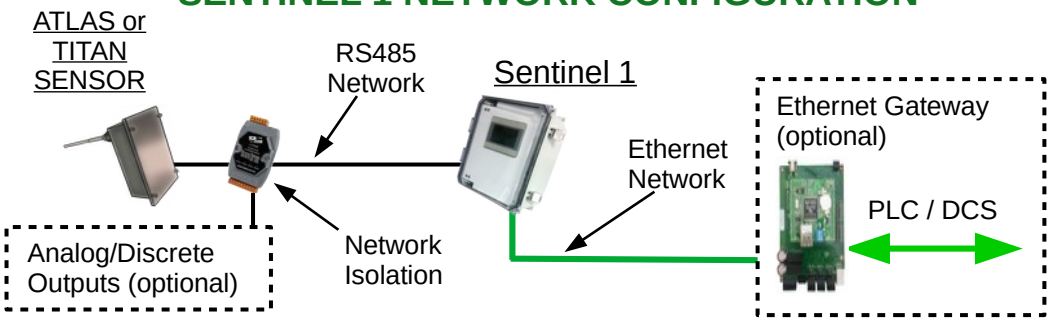
Dust Monitoring Systems

System Configurations

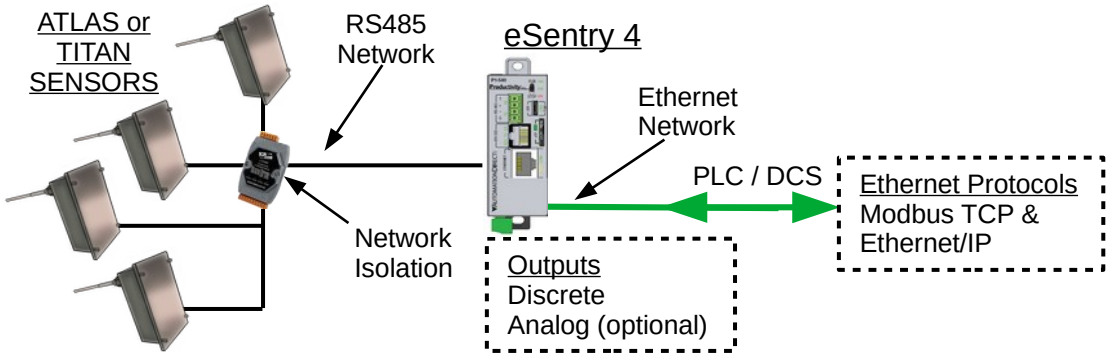
SENTINEL 4 NETWORK CONFIGURATION



SENTINEL 1 NETWORK CONFIGURATION



eSentry 4 Network Configuration



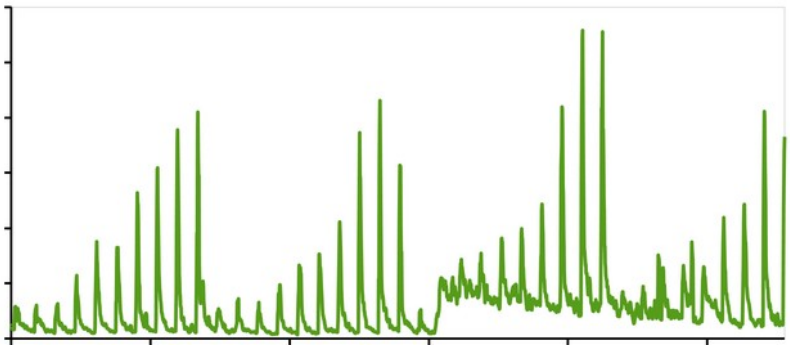
Dust Monitoring Systems

Controller and Interface Features				
	eSentry 4	**Sentinel 1 STD**	**Sentinel 1 XL**	**Sentinel 4**
Display	No	4.3"	7"	7"
Sensors	Up to 4	1	1	Up to 4
Data Logging	Y	Y	Y	Y
Sensor Communication	RS485, Modbus RTU			
Outputs				
Analog Outputs	-o-	-o-	-o-	-o-
Alarm Relays	Y	-o-	-o-	-o-
End User Communication				
RS485	---	---	---	---
Ethernet	Y	Y	Y	Y
User Communication Protocols				
Modbus TCP	Server	Client	Client	Client
Ethernet/IP	Server/ Adapter	Client / Scanner	Client / Scanner	Client / Scanner
o-Optional Feature/Function, may require additional equipment/hardware				

CONTROLLER AND INTERFACE

The **eSentry 4** is built on an industrial PLC platform that can communicate with up to four (4) Titan or Atlas dust sensors over an RS485 network. One of the strength's of the eSentry 4 unit is it's flexibility. The base configuration comes with discrete outputs for communication status and high dust alarms along with both Modbus TCP and Ethernet/IP communications and the ability to log data directly to a micro SD card. An analog output module can be added. And since our sensors handle all of the rolling average calculations and alarming functions, all you have to do is read the data.

Our family of **Sentinel** user interfaces are built on a standard industrial platform which provide the the user to configure and view live data from any sensor that is connected to it. Each Sentinel units also provide data logging to internal memory that can be backed up to an external USB drive. The amount of internal storage data is dependent on the actual model.



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 you needs range from process control to compliance or stand-alone systems to network integration we have systems that fit.

INDUSTRIES WE WORK WITH:

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

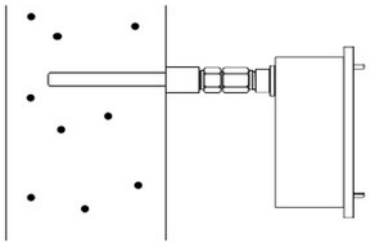
OUR APPROACH

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.

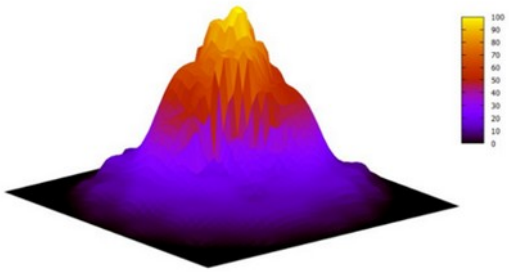
From robust industrial Ethernet communications to analog outputs. We can provide the system you need.

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 stables 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