

Q&A : WEBINAR on Dust Measurement Technologies

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Question received	Answer
The calibration is necessary for your dust monitor How frequently it should be calibrated.	It depends on the operation of each application, but for most applications, we recommends the calibration once a year.
Triboelectric dust monitor is suitable for liquid/chemical industry?	Most industries have many dust collectors. If the customers have dust collectors or collect the powder materials for their production, Dust Monitor has a chance to support their productivity and monitor emission monitoring.
How long maximum distance between sensor and display unit ?	The standard cable length is 5m. If the length is specified before the order, it can be maximum 100m.
Is there separated unit between sensor and display unit ?	Yes, we have separated type Dust Monitor, which consists of a sensor and a controller.
Is this equipment should calibrated periodically ? If yes, how many time calibration must do per year ?	It depends on the operation of the application, but for most applications, we recommends the calibration once a year.
How long is the lifetime of dust monitor?	It depends on the application, but it is designed for 7 - 10 years lifetime. It is lifetime of the electronics parts of the main signal processing.
The dust diameter has 2m length. Is the standard probe length applicable?	If the sensor is installed at proper position, the standard length 300mm can cover most applications even if it has bigger diameter like 2m. The proper position means the stable and even flow position without turbulence and blowers nearby.
Because air dust monitor is portable, the power supply line is not required?	It is portable, but for the current model, the power supply line is necessary: AC100V or 200V.
What are your major target segments for dust monitoring?	The target segments for Dust Monitor are various industries because Dust Monitor can support to monitoring emission or leakage if the customer has a stock or chimney to monitor dust emission or the customer has dust collectors.
About calibration, We have to return sensor to Japan, Is it correct?	If the sensor returns to our factory, we can calibrate it and send it back to the customer. If the customer requests the calibration at the customer side, our engineer will visit the customer factory with the calibration tool.
What is typical lifespan of the product?	It depends on the application, but it is designed for 7 - 10 years lifetime. It is lifetime of the electronics parts of the main signal processing.
How long sensor life time ?	It depends on the application, but it is designed for 7 - 10 years lifetime. It is lifetime of the electronics parts of the main signal processing.
Does it has RS485 Modbus output	We are afraid that RS485 is not available for our Dust Monitor. Our Dust Monitor has upper alarm contact, fault alarm contact, and 4-20mA analog output signals.
If the electronic board fail, can we change only the board? or need to change the new dust monitor?	We do not supply the only electronic board as the parts of the sensor because the calibration is required in our factory after exchanging the electrical board.
Can it measure carbon dust and what could be moisture content.	Yes, our Dust Monitor can be applied for the carbon material, and we have many supplied records for carbon at Tire industries. If it has too much moisture condition, the triboelectric sensor cannot work reliably.
About calibration issue, is it do by special engineer or can do by Customer ?	We recommend the calibration by our engineer because we submit the calibration report to describe the current condition of each sensor. If the customer strongly requests to calibrate the sensor by themselves, we can discuss to solve the customer's regulation or requirements.
Referring dust monitor: does the sensor need to fix specific location, or any location of discharge duct?	For Dust Monitor, the sensor should be fixed and installed at the straight portion without turbulence or non-even flow condition.
Can integrated type combine with transducer remote type?	The integrated type is not connected with the transducer. It directly output the signals to the customer DCS.
Do you will consider Exd. explosion proof std. in the future?	We have intrinsic safety explosion proof type (Ex ib IIB T4). As for now, we do not have a plan to get the other explosion certification.
can your remote sensor be placed in high vibration area? Name: Akash Sharma	We do not recommend to install the sensor under vibration condition because the electronics parts get impact from these vibration.
When the dust monitor calibration kits is ready in English version?	Yes, the calibration units shows the parameter or display in English.
How to calibration ? Do we need send the goods to japan ?	The calibration unit provide the signals to the sensor as the simulation of dust flow. According to the signal from the calibration unit, the monitor of the transducer and the output from the sensor is confirmed. If the sensor returns to our factory, we can calibrate it and send it back to the customer. If the customer requests the calibration at the customer side, our engineer will visit the customer factory with the calibration tool.
What is correct location where sensor can be mounted.	The Dust Monitor should be installed at even-flow (stable) and no turbulence condition. It should be installed at the straight portion where it is not near blowers and bending portions.
Who is the biggest competitor with Matsushima of Dust monitor?	The main competitors are the manufactures of triboelectric sensors including PCME, Sintrol, Goyen, and Auburn.
Portable dust monitor has battery or not	We are afraid that our Air Dust Monitor does not have battery system, so it needs the power supply line. However, our R&D team is trying to develop the other types of power supply including a battery
how much the maximum limit of moisture in air or humidity can your equipment withstand in Monsoon season in country like India ?	Our Dust Monitor can be applied at max. 40 vol.% in humidity as the reliable measurement.
Any interference we should take into consideration before installation?	When you decide the installation position of Dust Monitor, the sensor should be installed at even-flow and no turbulence condition. It should be installed at the straight portion where it is not near blowers and bending portions.
Last one, Can we transfer the data wirelessly?	We are afraid that our Air Dust Monitor is not wireless system. The power supply line and the signal line are necessary. However, our R&D team is now trying to develop the wireless as our next model.
What is the maximum volume for 1 air dust monitor?	The measuring range is 0.1 - 1000mg/m3
what should be the frequency for cleaning the probe?	It depends on the operation of Dust Collectors. We recommend to clean up the probe once a three month.