D52 DUST MONITOR

Smart measuring in harsh locations

D52 AT A GLANCE

- Detection limits (PM10) 0.01 to 1000mg/m3
- Sensor range between 0.30µm to 10µm
- Operating temperatures range from -20 to 50 °C
- Response time <60 sec
- Self-cleaning/minimal maintenance
- Mobile and fixed installation
- Wireless or site-specific interfacing

INTELLIGENT LASER SENSING TECHNOLOGY

Air quality management in mining, manufacturing and construction industries can be complex, mainly due to the volume and range of dust source types. The D52 is an ideal monitor for harsh, hazardous, dust-intense work environments, offering accurate, real-time dust monitoring, that will protect workers, improve operational processes and ensure regulatory compliance.

The D52 Dust Monitor uses laser sensing technology to count and measure particles below 10 micrometres (<10µm) in ambient air. Particulate matter is drawn into a dust impactor where particles <10µm are separated. Separation occurs via the impactor and cyclone. The particles <10µm are measured and counted, then placed into software bins for analysis. Results are displayed on an LCD screen detailing the time-weighted average (TWA) and particulate measured for 1µm, 2.5µm and 10µm.

SCADA software provides a simple, user-friendly operating platform to enable real-time particulate matter reading per field unit and dust size grouping.

The D52 is configurable to activate automated ventilation or dust suppression system preventing worker exposure to unhealthy dust levels.

ABOUT US

M3SH Technology is a Canadian OEM committed to creating an ecosystem of intelligent and integrated products that all work together to protect people and productivity. Providing clients with real-time data collected from sensors in the harshest industrial environments. Our technologies lead to increased automation, predictive maintenance, self-optimization of process improvements and a new level of efficiency and responsiveness to customers not previously possible.
M3SH Technology's goal is to empower our clients to monitor and manage risk with the best technology the industry has to offer and to prove that they have done everything in their power to manage risk to people and productivity: Intelligently.
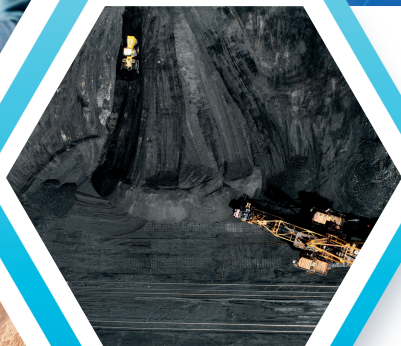Together, We Set The Standard.

ADVANTAGES OF THE D52 DUST MONITOR

USER-FRIENDLY WITH EASY DATA COLLECTION
Easy-to-read screen highlighting data readings and range limits. IoT enabled with easy data transfer - wired and wireless.

SELF-CLEANING AND MINIMAL SERVICE
No pumps, no filters, and no user-serviceable parts. Frequent blast action cleans dust from within the measurement chamber. Wipe the outside casing with a lint-free cloth to ensure display screen visibility.

COMPATIBILITY & INTEGRATION
Compatible with other M3SH IoT environmental monitors, wearables and location tracking sensors. It can be implemented as part of an automated dust ventilation and suppression system.

ACCURATE AND COST-EFFECTIVE
Equal high-quality performance when compared to other high-end instruments.
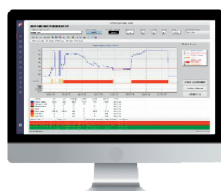
POWER OPTIONS & CONFIGURATIONS
- Exia 12V DC
- Non-Exia 12/24V DC
- 85 ~ 265 VAC

COMMUNICATION OPTIONS
- RS485 Modbus RTU cable connection
- IoT / Wi-Fi (802.11 b/g/n support and 802. 11 n (2.4 GHz), up to 150 Mbps)
- GSM
- M3SH network to buffer wireless connection
- Site-specific interfacing and remote connections are available

SOFTWARE OPTIONS
- Interfacing to any standard available SCADA package
- M3SH supplied SCADA with associated hardware and interfacing
- IoT interfacing options also available for far remote locations

SCADA SOFTWARE FIELD DATA
- Showing serial number, date/time and real-time particulate matter readings per unit
- Data readings against calibration benchmarks