



... Your Partner for Dust Monitoring

WHO WE ARE

3E is an International Engineering Company specialized in the fields of energy and environment, having an experience of more than 15 years.

WHAT WE DO

3E provides a tailored environmental monitoring consultancy service to both private and public sectors.

Our mission is to provide clients across Qatar and Gulf countries with essential air quality and noise measurement, dispersion modeling, and pollution control project management for all types of industry and construction sites, from planning through to completion, with a highly skilled professional team working together, using common sense and practical experience.

OUR COMMITMENT TO YOU

We are committed to use the highest quality instruments that give you the most accurate and reliable results.

AMONG OUR REFERENCES

- ⇒ Doha metro gold line – 10 stations
- ⇒ Al WAKRAH stadium early works package
- ⇒ Animal containment center in RAWDHAT AL FARAS
- ⇒ Qatar foundation - education city nursery
- ⇒ Al MILAHA logistic city
- ⇒ Qatar academy at Al KHOR
- ⇒ Qatar academy at Al WAKRA
- ⇒ SOUQ AL ALI
- ⇒ Doha Oasis Mixed Use Development Project
- ⇒ Mixed use development at airport road



AMONG OUR CUSTOMERS



OUR INSTRUMENTS FOR DUST MONITORING

- ❖ Dust Profiler
 - ✓ Measures and reports data in 1 minute intervals
 - ✓ Accurate simultaneous measurement of PM10, PM2.5, PM1, or TSP.
 - ✓ On board data storage for up to 15 years of data
 - ✓ Email and GSM data retrieval and alerts
 - ✓ Tough weatherproof enclosure with solar shielding for hot climates
 - ✓ Integrated weather, wind, noise sensors

DUST PROFILER

OUTDOOR REAL-TIME PARTICULATE MONITORING

Designed for those who want maximum data from a single monitor, the Dust Profiler provides continuous and simultaneous measurement of PM₁₀, PM_{2.5}, PM₁, and TSP. It uses an optical particle counter to calculate the particulate size distribution which is then converted into a mass measurement.

Compared to reference-equivalent monitors like TEOMs and BAMs which report single parameters at longer intervals, the Dust Profiler reports multiple parameters at 1 minute intervals and has a much lower total cost of ownership. In addition, the Dust Profiler is compact, re-locatable and can integrate wind, noise and weather sensors for maximum utility.

Highlights


- Measures and reports data in 1 minute intervals
- Accurate simultaneous measurement of PM₁₀, PM_{2.5}, PM₁, or TSP.
- On board data storage for up to 15 years of data
- Email and GSM data retrieval and alerts
- Tough weatherproof enclosure with solar shielding for hot climates
- Option to integrate weather, wind, noise sensors

Applications

- Air Quality Research
- Short term surveys
- Source apportionment
- Roadside Monitoring



Specifications

Measurement technology	Right angle laser scattering particle counter
Mass Range	PM1 0-200 µg/m ³ , PM2.5 0-2000 µg/m ³ , PM10 0-5000 µg/m ³ , TSP 0-5000 µg/m ³
Particle Counts (Optional) Range Size channels	0-1,000,000 counts/L 0.3, 0.5, 0.7, 1.0, 2.0, 3.0, 5.0, 10.0 µm
Accuracy	<±(5 µg/m ³ + 15% of reading)
Resolution	0.1 µg/m ³
Inlet	36cm heated inlet with TSP Head
Sample flow rate	1.0 LPM
Alarm	Relay, Email and SMS (optional)
Display	4-line alpha-numeric
Data logging	8GB SD card (>15 years data storage)
Averaging period	1-60 minutes
Software	Datalogging and configuration software included
Outputs	RS232 (38400 Baud) & 4-20mA / 2-10V (optional)
Mounting	Pole, tripod and wall mounting
Wireless communication options	GSM/GPRS modem with GPS; Orbit DATA (cloud-based DAS)
Integrated sensor options	Wind speed and direction; temp/RH; rain; pressure; noise (Class 1)
Environmental operating range	-10°C to +50°C*; 10 to 95% RH (NC)
Power requirements	Power requirements Mains 100 - 260V, 18W (standard) or regulated 12 (+/- 2.5%) VDC with <150 mVp-p ripple and noise (15W)
Enclosure	IP65-rated Lockable GRP Cabinet: Width 330mm x Depth 187mm x Height 483mm (including solar shield armour & mounting brackets)
Weight	<12kg
Conformity	

* Above 40°C laser may require more frequent servicing