



UNDERSTANDING, ACCELERATED



# OUTDOOR AIR MONITORING SOLUTIONS

CONTINUOUS REAL-TIME  
MONITORING FOR  
ANY ENVIRONMENT

# YOUR SOLUTION FOR SHORT-TERM OR LONG-TERM OUTDOOR SURVEYS AND REMOTE MONITORING APPLICATIONS



TSI offers a variety of real-time outdoor air monitoring devices to meet your needs suitable for harsh environments such as:

- + Construction/remediation sites
- + Mining sites
- + Wildfires
- + Other outdoor applications

TSI's line of DustTrak™ Aerosol Monitors are used to measure aerosol concentrations corresponding to PM1, PM2.5, PM10 and total size fractions. These instruments are ideal for short-term or long-term outdoor surveys and remote monitoring applications.

## ENCLOSURE OFFERINGS

### THE DUSTTRAK ENVIRONMENTAL MONITOR

The DustTrak Environmental Monitor is built for both indoor and outdoor use.

#### These units come standard with the following:

- + Improved pump for 24/7 operation
- + Auto zero standard
- + Improved beam dump designed for high concentration areas
- + Extra room to fit third party sensors

#### Base Model Contents

- + DustTrak Environmental photometer (8540, 8543)
- + Environmental enclosure
- + Omni-directional inlet with water trap
- + Size selective inlet conditioners
- + Netronix™ Thiamis 1000™ modem

### 8535 AND 8537 ENVIRONMENTAL ENCLOSURES

The 8535 and 8537 enclosures are designed to protect standard desktop DustTrak models (8530, 8533, 8530EP and 8533EP) when monitoring outdoors or in hazardous environments. The 8535 can be used when portability is required and the 8537 should be used when the location is fixed for a longer period of time.

#### 8535

- + Omni-directional inlet with water trap
- + Tripod mount
- + DustTrak strap
- + Battery straps
- + Power supply

#### 8537

- + Omni-directional inlet with water trap
- + DustTrak monitor shelf
- + Battery bracket
- + Power supply





# ADVANCED TECHNOLOGY UNSURPASSED PERFORMANCE



## REAL-TIME, NEAR-REFERENCE MONITORING

The term "near-reference" is tied to established air monitoring standards and methods. Data from near-reference air monitoring instruments is of sufficient accuracy and quality to complement or replace existing air pollution monitors and networks, and the equipment is less expensive to own and operate.

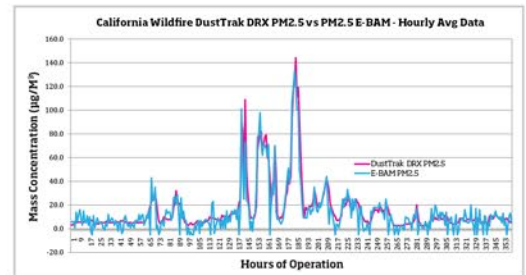
## COMPARISON OF ARIZONA ROAD DUST: DUSTTRAK DRX VS. TEOM\*

- + Faster response time
- + Continuous and faster data acquisition
- + Simultaneous measurement of size segregated mass fraction concentrations
- + Lower cost of ownership - one instrument can do the work of five

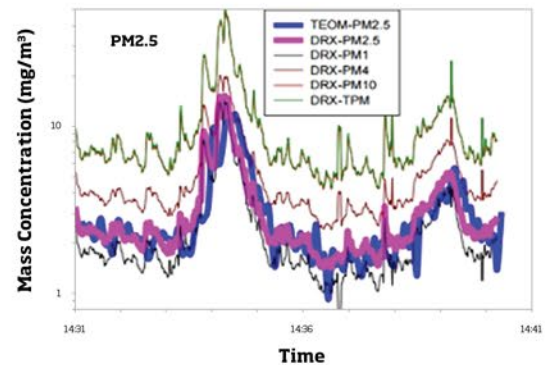
\*Tapered Element Oscillating Microbalance

## MCERTS CERTIFICATION

The DustTrak Environmental Monitor now meets the United Kingdom's environmental agency Monitoring Certification Scheme (MCERTS). MCERTS is based on International and European emissions standards and is the framework for monitoring instruments' quality requirements.

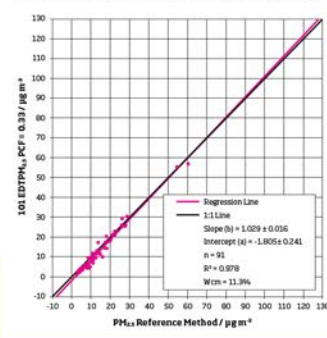


The PM2.5 24-hour average data from the DustTrak Environmental Monitor is shown to compare extremely well with the E-BAM (slope of 0.993 and R<sup>2</sup> of 0.99), as supported by the correlation plots above.



Comparison of Arizona Road Dust mass concentration measured by the DustTrak DRX and the TEOM with a PM2.5 impactor.

## TSI's DustTrak Environmental Monitors vs. SEQ47/50 Reference Method



**Single Channel PM2.5 Data**  
(PCF = 0.33) versus the PM2.5 SEQ 47/50 Reference Method - Comparison of 24 hour averages

# COMMUNICATION OPTIONS

## THE DUSTTRAK™ MOBILE APP – DOWNLOAD DATA WITHOUT LEAVING YOUR VEHICLE

TSI's DustTrak Environmental Monitor and various DustTrak models can now communicate with your mobile device through the DustTrak Mobile App. Combined with the wireless router and antenna, the DustTrak Mobile App allows you to quickly download, review and send logged data when within 150m of the instrument.

## THE CLOUD DATA MANAGEMENT SYSTEM – ACCESS DATA ANYTIME, ANYWHERE

The Cloud Data Management System, in partnership with Netronix™ Inc., provides the most comprehensive, turnkey remote dust monitoring solution on the market, to continuously log the data. The data can be accessed on demand - anytime, anywhere.

## TRAKPRO™ SOFTWARE MAKES MONITORING EASIER THAN EVER

TrakPro™ Data Analysis Software allows you to set up and program your DustTrak unit. It even features the ability for remote programming and data acquisition from your PC via wireless (922 MHz or 2.4 GHz) communications or over an Ethernet network. As always, you can print graphs, raw data tables, and statistical and comprehensive reports.

# ACCESSORIES

Part Number	Description
801903	DustTrak Mobile Router
801904	DustTrak Environmental Router Mounting Kit
801905	Thiamis 1000 Modem Kit
801906	8535 DustTrak Router Mounting Kit
801907	8537 DustTrak Router Mounting Kit
854020	PM10 Impactor
854021	PM2.5 Impactor
854039	Power Supply
854036	Battery Kit
854042	Replacement Water Trap Bottle
854043	Replacement Pump
854044	Replacement Sheath Air Filter
854048	Heat Shield
854049	Pole Mount Kit
854050	Lufft WS300 Metrology Station
854051	Lufft WS500 Metrology Station
854053	Tripod Mounting Kit
854054	Enclosure Heater
854060	Solar Power System
GM460	Gas Monitor

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