

Instrument Solutions DATASHEET

Quality products from leading manufacturers





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/redemption 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 ENVIRONMENTAL DUSTTRAK SERIES (8540AND8543)

The Environmental DustTrak is built for 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 (EDTPM10, EDTPM2.5, EDTDRX)

- + Environmental DustTrak photometer (8540, 8543)
- + Environmental enclosure
- + Omni-directional inlet with water trap
- + Size selective inlet conditioners (not necessary for EDTDRX)
- + 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
- + Tripod mount
- + 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*

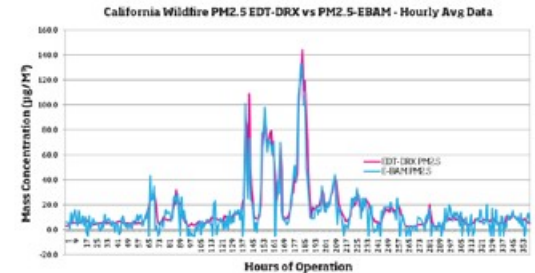
- + Faster response time
- + Continuous and faster data acquisition
- + Simultaneous measurement of size segregated mass fraction concentrations
- + Lower cost of ownership – one instrument can do the work of five

*Tapered Element Oscillating Microbalance

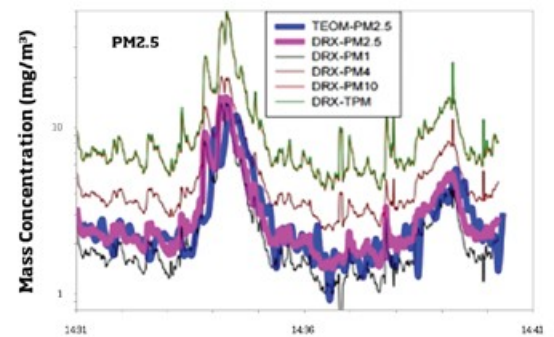
MCERTS MODELS

(EDTPM10M, EDTPM2.5M AND EDTDRXM)

Three new Environmental DustTrak models have been introduced that meet 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.

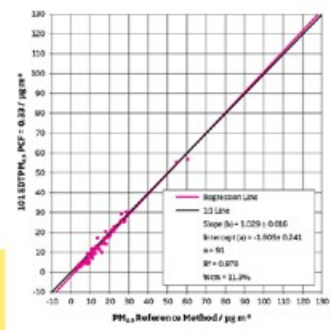


The PM2.5 24-hour average data from the Environmental DustTrak is shown to compare extremely well with the E-BAM (slope of 0.993 and R² of 0.99), as supported by the correlation plots above.



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

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



EDTPM2.5M
EDTPM2.5M (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 Environmental DustTrak 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

Model Number	Description
801903	DustTrak Mobile Router
801904	Environmental DustTrak Mobile App Mounting Kit
801906	8535 DustTrak Mobile App Mounting Kit
801907	8537 DustTrak Mobile App Mounting Kit
854034	Power Supply for Environmental DustTrak
854036	Battery Kit for Environmental DustTrak
854060	Solar Power System for Environmental DustTrak
801856	8540/8543 Power Supply 24V DC 3.0A
801905	Thiamis 1000 Modem Kit
854031	Pole Mount Kit for 854030 Enclosure
854032	Heat Shield for 854030 Enclosure
854033	Heater for 854030 Enclosure
854020	PM10 Impactor
854021	PM2.5 Impactor
854042	Replacement Water Trap Bottle
854043	Replacement Pump for Environmental DustTrak
854044	Replacement Sheath Air Filter for Environmental DustTrak
854050	Lufft WS300 Metrology Station
854051	Lufft WS500 Metrology Station

TSI and the TSI logo are registered trademarks, and DustTrak, and TrakPro are trademarks of TSI Incorporated.

Netronix and Thiamis 1000 are trademarks of Netronix Inc.



UNDERSTANDING, ACCELERATED

Available from BSRIA Instrument Solutions
Tel No. 01344 459314
www.bsria.co.uk/instruments

Instrument Solutions: Quality products from leading manufacturers



Hire

BSRIA Instrument Solutions offer an extensive range of quality test and measurement instrumentation for you to hire. The widest range and in-depth stocks of the latest equipment are available at competitive prices. BSRIA Instruments Solutions has built its fine reputation by providing the most reliable and advanced equipment from the leading manufacturers and supporting it with a high level of customer service and technical support to meet with your requirements and expectations.

- Fast delivery: next day or same day delivery available
- Flexible terms: short and long term hire contracts
- Latest technology: new models added to stock regularly

E: hire@bsria.co.uk

Sales

BSRIA Instruments Solutions specialises in providing test and measurement products in many fields of measurement, especially in the building services sector. Appointed as an official distributor for over 25 of the leading manufacturers in the test and measurement instrumentation market, we are able to offer a choice of the best instruments available to reach your requirements.

- Call for a competitive quote
- Many instruments available ex-stock
- In-house calibration options available on most instruments
- On-line purchasing available for many products on our website

E: instruments@bsria.co.uk

Calibration

The ISO and UKAS accredited calibration department within BSRIA Instrument Solutions draws upon many years of BSRIA's experience in the building services industry. This unparalleled knowledge of the measurement and instrumentation requirements of the services industry gives the calibration department a unique advantage to meet your calibration needs.

- Fast service: 5 days standard turnaround
- 24 hours and while-you-wait services available on request
- Custom calibration points
- For a full scope of calibration please call

E: calibration@bsria.co.uk

-  Improving the built environment
-  Delivering knowledge
-  Measuring compliance and performance
-  International

BSRIA North
Preston

BSRIA head office
Bracknell

Calibration laboratories and offices in the South and North:

Old Bracknell Lane West, Bracknell, Berkshire
RG12 7AH

68 Walton Summit Road, Walton Summit Centre,
Bamber Bridge, Preston, Lancashire PR5 8AQ



W: www.bsria.co.uk/instruments

T: 0800 254 5566 (UK Free)

T: +44 (0)1344 459 314

