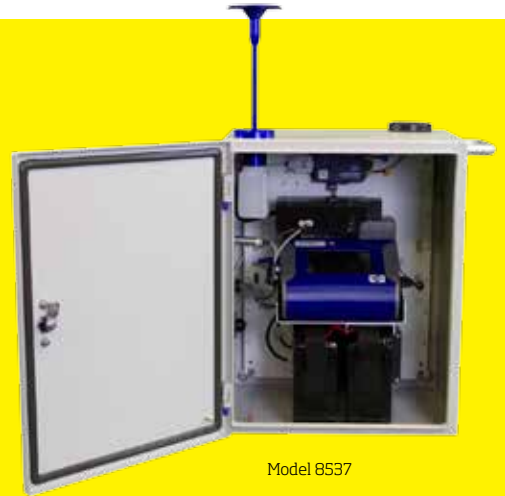


DUSTTRAK™ AEROSOL MONITOR ENVIRONMENTAL ENCLOSURE MODELS 8535 AND 8537

The DustTrak™ II and DRX Aerosol Monitor Models 8530, 8530EP, 8533 and 8533EP are portable, battery-operated, laser-photometers that measure and record airborne dust concentrations. The DustTrak Aerosol Monitors have custom-designed, waterproof Environmental Enclosure Models 8535 and 8537 for added security and protection. Primarily for use in outdoor applications, the enclosures are also advantageous for use in indoor industrial applications to provide a secure method of deploying the DustTrak Aerosol Monitor and optional accessories.



Model 8535



Model 8537

Features and Benefits

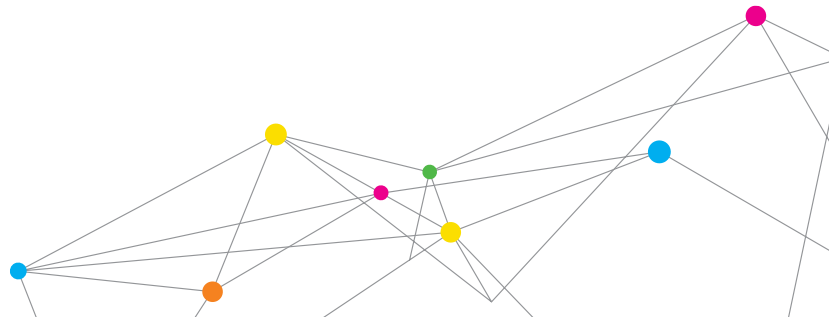
- + 360° omni-directional sampling inlet specifically designed to sample efficiently in a broad range of wind conditions
- + Water trap that prevents precipitation from entering the instrument
- + Optional accessories
 - Internal Battery System
 - Heat Shield
 - Solar Power System
 - GSM/GPS communication modem
 - Heated Inlet Sample Conditioner

Applications

- + Outdoor environmental monitoring
 - Fugitive emissions monitoring
 - Site perimeter monitoring
 - Fence-line monitoring
 - Dust control operations
 - Environmental research studies
- + Construction sites
- + Harsh industrial environments
- + Urban pollution studies





UNDERSTANDING, ACCELERATED





DustTrak Aerosol Monitor Environmental Enclosure

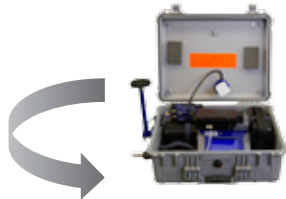
| Available Optional Accessories | Model 8535 | Model 8537 |
|--|--|---|
| |  |  |
| | Portable, polypropylene weatherproof case | Weatherproof NEMA 3R rated metal case |
| Internal Battery System | P/N 801807 | |
| Heated Inlet Sample Conditioner | P/N 801850 (with Autozero module) P/N 801851 (without Autozero module) | |
| GSM/GPS Communication Modem (Netronix™ Thiamis™) | P/N 801901 | P/N 801900 |
| Heat Shield | P/N 801810 | P/N 801846 |
| Solar Power System | P/N 801811 | |
| Built-in Survey Tripod Mounting Plate | Included | N/A |
| Pole Mounting Kit | N/A | P/N 801844 |



Optional Accessories

Cloud Data Management System

TSI partners with Netronix to provide the most comprehensive turnkey remote dust monitoring solution on the market. Using purpose-built telemetry hardware along with the Netronix Thiamis, the DustTrak Aerosol Monitor Models II/DRX can constantly stream data from the field to be hosted on the Netronix Cloud. The data can be accessed on demand anytime, anywhere – with the ability to auto-send alert notifications direct to email inbox and SMS text messages.



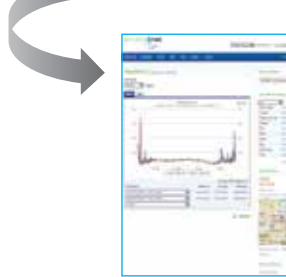
TSI DustTrak Aerosol Monitor in Environmental Enclosure
Real-time, data logging instrument configured with telemetry hardware enclosed in protective case.



Netronix Thiamis GSM/GPS Communication Modem
Remote monitoring unit with built-in GSM modem and GPS that connects the DustTrak to the Netronix Cloud.



Netronix Cloud
A network of data centers that offer reliable and secure operation of the remote monitoring service.



Netronix Environet™ Communication Management System
Comprehensive web-based application for data analysis and monitoring. Monthly access fees apply. Features include:

- + Real-time data analysis
- + Accessible anytime, anywhere from any internet enabled device
- + Sophisticated alert monitoring with email and SMS text messaging notifications
- + Google™ Maps display for instrument pinpointing

Heated Inlet Sample Conditioner

Heated Inlet Conditioning Module plugs into the Autozero Module atop the DustTrak Aerosol Monitor to condition sample to select humidity level.

Internal Battery System

Provides continuous power to the DustTrak Aerosol Monitor and the wireless radio modems when dedicated AC power is not available, allowing 24/7 operation. Includes two 22 Ah lead acid batteries (charge one while using the other) and battery charger with universal line cord.

Heat Shield

Custom metal cover to shield the enclosure from solar radiation (includes mounting hardware).

Solar Power System

Provides continuous power to the DustTrak Aerosol Monitor and the wireless radio modems when dedicated AC power is not available. Works in conjunction with the internal battery system to aid in autonomous 24/7 operation. Includes two solar panels with stand, weatherproof battery and charge regulator enclosure, charge regulator, extended-life lead acid battery and DC power cable.

Pole Mounting Kit

Includes bracket, hardware and mounting straps to attach environmental enclosure to a fixed pole ranging 4" - 6" in diameter.



Specifications are subject to change without notice.

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

Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries.

VELCRO is a registered trademark of Velcro Industries B.V.

Netronix, Thiamis and Environet are trademarks of Netronix Inc.

Google is a trademark of Google.

SPECIFICATIONS

DUSTTRAK™ AEROSOL MONITOR ENVIRONMENTAL ENCLOSURE MODELS 8535 AND 8537

Sampling Conditions

| | |
|-----------------------|---------------------------|
| Wind Speed | 0 to 22 mph (0 to 36 kph) |
| Operating Temperature | 32 to 120°F (0 to 50°C) |
| Storage Temperature | -4 to 140°F (-20 to 60°C) |

Physical (Model 8535)

| | |
|---|--|
| External Dimensions (H x W x D) | 8.1 x 16.9 x 20.6 in. (21 x 43 x 52 cm) |
| Weight (with Internal Battery System and DustTrak) | 38 lb (17 kg) |

Physical (Model 8537)

| | |
|---|---|
| External Dimensions (H x W x D) | 20 x 16 x 12 in. (50.8 x 40.6 x 30.5 cm) |
| Weight (enclosure only) | 36 lb (16.3 kg) |
| Weight (with battery system, DustTrak EP, Heated Inlet, Modem) | 76 lb (34.5 kg) |

INTERNAL BATTERY SYSTEM

Power Requirements

| | |
|-----------------------|---------------|
| Internal Battery Pack | 12 VDC, 22 Ah |
|-----------------------|---------------|

Battery Run-time

| | |
|---|--|
| DustTrak II/DRX with External Pump | 21 - 24 hours (typical) |
| DustTrak II/DRX EP & Heated Inlet | approx. 15 hours |
| Dual Battery Wiring Harness #801817, two 22Ah battery packs #801808 | Run-time is typically twice the time quoted for a single battery pack |

Battery Charge Time

8-9 hours at 72°F (22°C) (New battery, deep discharge to 95% charge)

SOLAR POWER SYSTEM

Power Requirements

| | |
|-----------------------|--|
| Solar System Run-time | Continuous (with adequate sunlight) |
| Rated Power | 80 x 2 watts |
| Power Tolerance | ±5% |
| Nominal Voltage | 12 volts |
| External Battery Pack | 12 VDC, 100 Ah |
| Battery Run-time | 90 to 120 hours (typical) |
| Battery Charge Time | <10 hours at 72°F (22°C) (New battery, deep discharge to 95% charge, with adequate sunlight) |
| Operating Temperature | 32 to 120°F (0 to 50°C) |
| Storage Temperature | -4 to 140°F (-20 to 60°C) |

Physical (Solar Panels)

| | |
|------------------------|---------------------------------------|
| Dimensions (H x W x D) | 2 x 43 x 48 in. (5 x 109 x 122 cm) |
| Weight | 34 lb (15.3 kg) |

Physical (Battery and Case)

| | |
|------------------------|--|
| Dimensions (H x W x D) | 8.5 x 15.3 x 17 in. (22 x 39 x 43 cm) |
| Weight | 85 lb (38.3 kg) |

HEATED INLET SAMPLE CONDITIONER

| | |
|----------------------|--|
| Power Consumption | 12 VDC, 13 watt |
| Operating Conditions | Indoor/outdoor use Temperature 0 to 50°C (32 to 122°F) 2,000 m (6,561 ft.) Humidity: 5-95% Rh, non-condensing Pollution degree II Overvoltage degree II |
| Storage Temperature | -20 to 60°C (-4 to 140°F) |
| Dimensions | 7.6 x 3.5 x 2.3 in. (19.3 x 8.9 x 5.8 cm) |
| Weight | approx. 1 lb (454 g) |
| Warm-up Time | 17 minutes |
| Settings | 30%/40%/50% Rh |

GSM/GPS COMMUNICATION MODEM

| | |
|----------------|--|
| Quad-band EGMS | 850/900/1800/1900 MHz |
| Output Power | Class 4 (2W) @ 850/950 MHz Class 1 (1W) @ 1800/1900 MHz |
| Sensitivity | -107 dBm (typ.) @ 850/900 MHz -106 dBm (typ.) @ 1800/1900 MHz |
| GPRS | Class 10 |
| Antenna | SMA male connector |
| SIM Card | Pre-installed |

GPS

| | |
|------------------------|---|
| Sensitivity | -159 dBm (indoor operation) |
| Accuracy | <2.5 m (8 ft.) |
| Channel | 20 |
| SBAS Support | WAAS and AGNOS |
| Correlators | >200,000 |
| Antenna | SMB jack connector |
| Input Voltage | 6-24 VDC |
| Current Consumption | 50mA |
| Operating Temp | -30 to 75°C (-22 to 167°F) |
| Humidity Range | 0-85% non-condensing |
| Clock | Real Time |
| Memory | 4 MB (up to 16 MB) |
| Digital ports | RS-485, RS232, (3 multiplexed), SDI-12 |
| DeltaPort | Expansion port for Analog and Digital I/O Module |
| Dimensions (L x W x H) | 5.1 x 2.72 x 1 in. (13.0 x 6.9 x 3.0 cm) |





Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



UK Office

Keison Products,

P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.

Tel: +44 (0)330 088 0560

Fax: +44 (0)1245 808399

Email: sales@keison.co.uk

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.