

# TE-WILBUR



## PM2.5 or PM10 Ambient Air Monitoring



The USEPA approved TE-Wilbur low-volume air sampler, is the most advanced particulate collection system in the industry. The TE-Wilbur can be configured for TSP, PM10, PM4, PM2.5, PM1 and any other particulate separation device with a flow rate between 1-25 SLPM. Featuring modern, industrially hardened components paired with innovative design and state of the art manufacturing, the TE-Wilbur is the future of particulate collection. The TE-Wilbur is ideal for environmental monitoring, fence line monitoring and industrial monitoring. The TE-Wilbur is designed to operate in any environment and is set up for quick and easy deployment. The TE-Wilbur exceeds all performance specifications set forth by the USEPA for low-volume particulate collection.

The TE-Wilbur user interface is a full-color 5.7" touchscreen which utilizes intuitive setup and configuration. Sample setup can be accomplished in just a few keystrokes. The TE-Wilbur features easy to access menus, step by step calibration and on-screen status alerts. Volumetric flow is controlled through an integrated mass flow meter and on-board ambient temperature and pressure sensors. Filter exchange is accomplished through a modern filter exchange mechanism that allows easy one-handed operation. In addition, the filter exchange mechanism does not require continual adjustment to seal your filter against leaks. Data can be retrieved through the local USB port with a thumb drive or remotely via FTP transfer. The TE-Wilbur also has built-in networking functions that allow emails to be sent with data logs and to notify operators that an alarm occurred. An optional wind direction and speed sensor is available that integrates into the TE-Wilbur to control samples based on wind sensor data.

- ④ **USEPA approved Federal Reference Method**
- ④ **Exceeds USEPA 40CFR part 53, 50 Appendix L**
- ④ **Multi-language Support**
- ④ **Data retrieval via USB, Email, FTP**
- ④ **Preprogrammed for USEPA sample schedules**
- ④ **Integrated Uninterrupted power supply**
- ④ **Low maintenance / cost to operate**
- ④ **Brushless DC pump**
- ④ **Color Touchscreen**
- ④ **Intuitive setup and calibration**
- ④ **No adjustment Tisch filter exchange mechanism**
- ④ **Manufactured in a ISO 9001 facility**
- ④ **Optional wind sensor Integration**

## General Specifications

### Particulate Size:

**PM10:** Main inlet is USEPA-designed PM10 size selective louvered inlet (TE-PM10-D)

**PM2.5:** TE-PM2.5C, VSCC or WINS impactor

**Other:** TSP, PM4, PM1

### Sampling Interval:

Preprogrammed USEPA 1 in 3, 1 in 6, 1 in 12, 24hr sampling and custom sample intervals  
Meteorological sampling triggers

## Environmental Specifications

### Operating Temperature:

-35 °C to 50 °C

### Ambient Temperature Sensor:

Sensor: PT100 RTD

Accuracy:  $\pm 0.15^{\circ}\text{C}$

Resolution:  $0.01^{\circ}\text{C}$

### Filter Temperature Sensor:

Sensor: PT100 RTD

Accuracy:  $\pm 0.15^{\circ}\text{C}$

Resolution:  $0.01^{\circ}\text{C}$

### Barometric Pressure Sensor:

Range: 450 mmHg to 1238 mmHg

Accuracy:  $\pm 10.00$  mmHg

Resolution: 0.75 mmHg

### Flow Control Specification:

Brushless DC Pump operates at 16.67 L/min

Range: 0-25 Liters per minute

Accuracy:  $\pm 2\%$  or less (0.33L/min)

Repeatability:  $\pm 1\%$  of full scale (0.25 LPM)

Resolution: 0.01 LPM

Real-time precision flow control

## Electrical Specifications

### Power Requirements:

Input: 100-240VAC, 50/60Hz, 0.5A Max

Output: 24VDC, 60watts Max

### Optional:

Solar, wind, or enhanced battery operation

## Applications

### Regulatory Monitoring:

USEPA Designations:

RFPS-1014-219 for PM2.5

RFPS-1014-216 for PM10

Uses 47mm PTFE filters standard, other filter material types are available

Remote Monitoring

Dust Monitoring

Site Development

Bulk Transport

Employee Safety

Fence Line Monitoring

## Communication Specifications

### Included I/O:

**MODBUS TCP:** for gathering data via ethernet port into data acquisition system

**USB:** for local download of runtime data and history data

**Email:** If networked via local ethernet port, can send data logs, history logs and alarms

**RJ45 Ethernet:** Full remote control and monitoring using any internet browser

## Physical Specifications

### Weight:

48lbs / 21.8kg without stand

### Dimensions:

20"W x 20"H x 10"D

508mm x 508mm x 254mm

## Contact Information

### Tisch Environmental

145 S. Miami Ave

Cleves, OH 45002

513-467-9000

sales@tisch-env.com