# HI-TRAC® PM

# ROADSIDE PARTICLE MONITORING SYSTEM

- Accurate air quality data for the traffic and environmental industry
- Auto baseline correction and dew point compensation
- Easy to install and rotate



#### **OVERVIEW**

The HI-TRAC® PM automatically measures real-time airbourne PM10, PM2.5, PM1.0 or TSP particulate concentration at any roadside location. The remote sensor interfaces seamlessly with the HI-TRAC® iGATE and offers real time air quality information.

The HI-TRAC® PM now has auto baseline checking to ensure data integrity over longer periods of use as well as micro controlled flow regulation and automatic dew point compensation. This makes the HI-TRAC® PM very reliable and easy to use. Data is gathered and presented via the HI-TRAC® iGATE and is presented in a wide range of customer specific styles.

The HI-TRAC® PM will provide accurate, AQ data 24 hours a day. When combined with our gaseous monitor and weather sensors, the HI-TRAC® iGATE AQ station is the only roadside equipment to deliver both the primary AQ data from gaseous and particle sensors. This is then automatically integrated with important data from related sensors such as wind speed, direction, Relative Humidity (RH) and temperature.

The HI-TRAC® PM is the most feature-packed light-scatter Aerosol Monitor available. The HI-TRAC® PM is ideal for all roadside applications and is supplied with mounting brackets and local cabling.

# **KEY FEATURES**









#### **BENEFITS**

- · Easy to install
- · Auto calibration
- · 12 month maintenance period
- Full integration of all data
- · Real time monitor

#### **APPROVALS**

- Approvals: CE, ISO-9001. Designed to agree with EPA Class I and Class III FRM/FEM particulate samplers and monitors
- · Not an EPA-designated equivalent method

#### **SOFTWARE**

- HI-COMM 100 Compatible
- · Data hosting and reporting services







# TECHNICAL SPECIFICATIONS

#### **MEASUREMENT**

Measurement Principles: forward light scatter laser Nephelometer

Available Cut Points: Total Suspended Particles (TSP) Inlet Standard

PM10, PM2.5, and PM1.0 sharp-cut cyclone inlets

Measurement Range: 0 to 100 mg/m3 (0 to 100,000 g/m3)

Measurement Sensitivity: 001 mg/m3

Nephelometer Accuracy:  $\pm~5~\%$  traceable standard with 0.6 um PSL

Particle Size Sensitivity: 0.1 to 100 micron Optimal sensitivity 0.5 to 10 micron particles

# STABILITY

Long Term Stability: 5 % with clean optics

#### LASER

Diode Laser, 5 mW, 670 nm Visible red

#### DISPLAY

2 X 16 backlit LCD. Provides information on operation including:

Power, Flow Operation, Status and Concentration

#### **ZERO CALIBRATION**

Automatic Zero Calibration every hour or as programmed from HI-TRAC®

# **PUMP TYPE**

Brushless Diaphragm (20,000 hour)

# FLOW RATE

2.0 litres/minute ± 0.1 lpm Actual volumetric flow

# POWER SUPPLY

15-40 VDC @ 1.5 A maximum



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