PRODUCT OVERVIEW

Airtec™

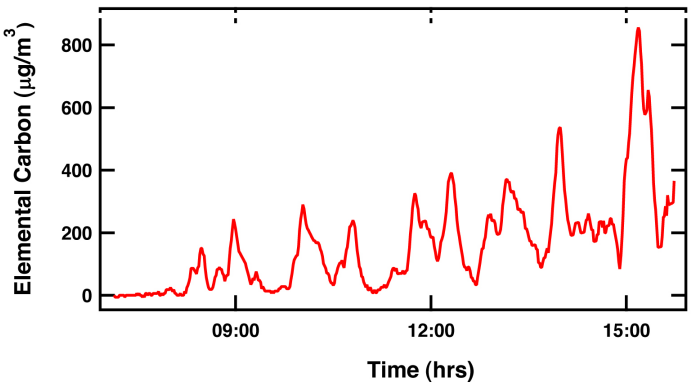
WEARABLE, REAL TIME DPM / EC MONITOR REPLICATES NIOSH 5040

The Airtec Diesel Particulate Monitor (DPM) from FLIR displays elemental carbon levels in real time, taking the measurement out of the laboratory and placing it in the hands of the mine operator/ventilation engineer. Sensitive, rugged and easy to use, the Airtec monitor provides results that are time-and-space-resolved. This capability enables rapid modification of vehicle use, personnel placement and mine or building ventilation. The monitor uses technology developed by the diesel particulate group at the NIOSH Pittsburgh Research Laboratory and has been determined to precisely replicate results from their method 5040 test.

In addition to being compact and light-weight enough to be worn on a miner's belt, the Airtec monitor can be mounted in a vehicle cab, on a mine wall or on ventilation equipment. The monitor operates on a Lithium-ion battery for more than a full shift or AC power using an adapter. Readings are displayed on an LCD screen with a user-selectable backlight and data can be downloaded using supplied software via USB connection for review of an extended monitoring period. The instrument has an integrated air pump and submicron particle size selector; allowing for immediate use.

PRODUCT FEATURES

- Lightweight, rugged device
- Wearable by miners on a belt loop
- High sensitivity to DPM
- Contains a flow-selectable air pump
- Equivalent results to NIOSH method 5040
- Large display
- Battery or AC power



8-hour TWA EC Concentration Comparrison via:
1: NIOSH 5040 150.25 µg/m^3
2: Airtec monitor 154.36 µg/m^3

BENEFITS

- Decreased DPM monitoring costs
- Helps prevent MSHA non-compliance
- Increased miner safety
- High DPM level alarms
- Allow engineering control evaluation
- Enables ventilation on demand (VOD)
- Bolsters confidence in a healthy environment
- Real time results

GASTECH AUSTRALIA

SPECIFICATIONS

System Weight	1.5 lbs (681g)
Power Requirements	7.4 VDC (built-in Li-ion battery) 100 - 240 VAC (wall charger)
Sensitivity	< 15 µg/m³ elemental carbon (EC)
Dynamic Range	9-600 µg/m³ (8hr TWA EC)
Output	LCD display with user-controlled backlight User selectable 1, 5, 15 min. averaging EC and TC data logged 8 hr TWA DPM levels Mini-USB connection Optional 4-20 mA output
Alarms	Low battery, filter change necessary Pump flow LCD alerts
Battery Life	>12 hrs
Dimensions	Approx 12.1cm(H) x 13.3cm(W) x 6.4cm(D) 4.75"(H) x 5.25"(W) x 2.5"(D)
Data Archive	2.75 to 66.6 days (1 min. to 1 hr sample intervals)

TRAINING & SUPPORT

In addition to a comprehensive manual, the monitor comes with a simple quick start guide describing:

- Basic operation
- Routine maintenance
- Troubleshooting
- Principle of operation

Customer support is available by phone or email and annual recalibration is available.

FLIR is a leader in the development and integration of advanced sensor technologies for homeland security, force protection and commercial applications. Our sensors and air samplers are used by government and commercial customers to detect explosives, radiation, bioagents, hazardous chemicals and gasses.

OPERATIONAL ADVANTAGES

- Real time results
  - No more waiting days or weeks for results
- Can be worn on a belt or vehicle/wall mounted
  - Light and highly portable
- No filters to send to an outside lab
  - All measurements done on the instrument
- Easy to use
  - Self-explanatory interface
- Verifies effectiveness of ventilation
  - Allows corrective action to be taken
- Generates dozens to thousands of EC concentration values for less than a single NIOSH 5040 test
- Can connect to a data network via optional 4-20 mA output
- Specifically detects DPM (via EC measurements); no sensitivity to common mine interference

GASTECH AUSTRALIA

CONTACT INFORMATION

GasTech Australia Pty Ltd
24 Baretta Rd
Wangara Western Australia 6065
Tel 1800 999 902
Fax 1800 999 903
http://www.gastech.com.au