

# SERIES 90N AMBIENT AIR QUALITY MONITOR

## THE INSTRUMENT

The TECHNOVATION SERIES 90N AIR QUALITY PORTABLE ANALYSER measures the concentration of a single pollutant gases in parts per million. The Standard Sensor Mounting is internal in conjunction with an inbuilt pump to educt the sample gas over the sensor. The inbuilt pump facilitates drawing the sample at a height and a distance through a long enough suitable tube. Optionally the sensor can be externally mounted on a cable of specified length, at its end Or surface mounted on the instrument to measure the sample gas in diffusion mode in ambient air for long periods of time.

## FEATURES

- Accurate, Reliable, Low Cost & Rugged
- Internal Pump OR Sensor on cable option
- Rechargeable battery
- One Audible and visual alarm
- Low battery alarm

## APPLICATIONS

These analysers are useful in measuring the pollutant gases for compliance with air quality limits under "The Environmental Protection Act". Ambient air monitoring can be done continuously under certain conditions of use.

## STANDARD SPECIFICATIONS

- Range & Gas : ANY ONE form table below
- Display : LCD, 31/2 digits.
- Sensor Type : Electrochemical, with life expectancy of 3 years.
- Working Temp : 0-40°C for instrument.
- Accuracy : ±5% at constant temperature & pressure.
- Zeroing : With ZERO grade Air.

Pollutant Gas Measurements  
**Required By The "Environmental Protection Act" Made Easy**



## TECHNOVATION® SERIES 90N

### STANDARD SPECIFICATIONS CONTINUED

- Power Supply : Standard by internal 12V 1.3AH rechargeable battery
- Size : 195 x 98 x 155mm
- Weight : 1.3kg.
- Pump flow : 1 liter/minute
- Pump suction : 8" Hg Column
- Flow indicator : Provided in instruments with Pump
- Output : 0-1V

## ACCESSORIES

Carrying case, Mains cord, Flow thru cap, Instruction manual, Hand aspirator bulb, Silicone rubber tubing, Calibration screw driver. supplied as per option chosen.

## OPTIONS

- Power: 220 VAC mains supply
- Sensor mounting at end of specified cable length or surface mounted on instrument

| GAS             | RANGE      | RESOLUTION                                      | 1 ppm Conversion = $\mu$ g/m <sup>3</sup> | T(90)   |
|-----------------|------------|---|---|---------|
| CO              | 0 to 199.9 | 0.1 ppm = 100 ppb = 114 $\mu$ g/m <sup>3</sup>  | 1 ppm CO = 1140 $\mu$ g/m <sup>3</sup>    | 40 secs |
| SO <sub>2</sub> | 0 to 19.99 | 0.01 ppm = 10 ppb = 26.3 $\mu$ g/m <sup>3</sup> | 1 ppm SO = 2630 $\mu$ g/m <sup>3</sup>    | 60 secs |
| NO              | 0 to 19.99 | 0.01 ppm = 10 ppb = 18.7 $\mu$ g/m <sup>3</sup> | 1 ppm NO = 1870 $\mu$ g/m <sup>3</sup>    | 80 secs |
| O <sub>3</sub>  | 0 to 19.99 | 0.01 PPM = 10 ppb = 21.3 g/m <sup>3</sup>       | 1 PPM On = 2130 $\mu$ g/m <sup>3</sup>    | 80 secs |

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| Conversion of x ppm to $\mu$ g/m <sup>3</sup> or mg/m <sup>3</sup> | Mol wt of CO = 28, SO = 64.6, NO = 46, O <sub>3</sub> = 48   |
| $\mu$ g/m <sup>3</sup> = x ppm X mol. wt X 10 <sup>6</sup> /24470  | mg/m <sup>3</sup> = x ppm X mol.wt X 10 <sup>3</sup> / 24470 |