

PORTABLE GAS CHROMATOGRAPH SYSTEM

Model ~ 4650 zNOSE®

FEATURES:

- DETECTS HYDROCARBONS – C4 TO C25
- PORTABLE – FIELD READY
- SELF CONTAINED
 - INTERNAL SAMPLE PUMP
 - INTEGRATED COMPUTER
- QUANTITATIVE
- QUALITATIVE ANALYSIS
- LOCKING SENSOR POSITION
- EXCEPTIONAL SENSITIVITY
- ANALYZE VAPORS IN 30-60 SECONDS
- DATA STORAGE & ARCHIVE
- DATA TRANSFER USB PORT
- DISPLAY ON LAPTOP
- DC POWER WITH CHARGER



APPLICATION:

The 4650 zNOSE® Vapor detector and analyzer is a field ready fully integrated system. With an internal sampler pump and integrated computer, the 4650 zNOSE® identifies vapors as low as parts-per-billion.

A proprietary Surface Acoustic Wave (SAW) detector results in a system with previously unattainable sensitivity in a portable low-cost package.

DESCRIPTION:

- Carrier Gas: Helium, Typical 200 - 300 tests per day per charge
- Analysis Time: 30– 60 Seconds
- Display: Windows any version

Utilizing a trap and helium carrier gas, the Model 4650 injects samples into a heated column and separation takes place. Materials sequentially exit the column and are deposited on the SAW detector. The deposit results in a change in the oscillating frequency of the resonator directly proportional to the mass.



**TECHNICAL ASSOCIATES
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Divisions of



US NUCLEAR CORP

PORTABLE GAS CHROMATOGRAPH SYSTEM

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SPECIFICATIONS:

DETECTOR: Surface Acoustic Wave (SAW) Quartz microbalance
Dynamic Range: 10^5
Temperature: 0° C to 150° C, programmable
Detects: C4 to C25
Sensitivity: Parts per billion for many compounds in 10 seconds
Sensitivity will vary by compound sampling time, matrix, interferences & detector temperature ranges.
Accuracy: <2% standard deviation
Dynamic Range: $10^6 \pm 10\%$
Recycle Time: 30 sec minimum

SAMPLING:

Sample Pump: Internal
Sample Introduction: ~.5 ml/sec
Sample Time: 1-300 seconds, User Settable
Sample Absorption: Internal tenax preconcentrator
Carrier Gas: Helium, (Min 99.999% purity, #6)
Replaceable Cylinder 95cc at 17.6MPz (2560 psi)
Typical use is 200 - 300 tests per day on one helium charge
Compound Identification: Automatic with user calibration

COLUMN:

Limits: 35°C to 225°C -depending on column
Ramping: 1 – 18° C/sec

Display: 10.8 in Clear Type Full HJD Plus
Resolution: 1920 x 1280
Screen: 10 Point Multi-Touch Surface Pen

ENVIRONMENT:

Operating Temperature: 32°F to 105° (0°C to 40°C)
Relative Humidity: 0 – 95% non-condensing
Power: Battery Pack: 28V DC, 16 AHr Lithium Ion (5 hr typical)
Charger Power: 100 – 127 VAC at 3 amps – 50/60 Hz;
200 - 240 VAC at 1.5 amps – 50/50 Hz

INLET CONNECTION / TEMPERATURE

Inlet Port: Stainless steel LUER
Temperature: 50°C to 200°C

DATA STORAGE & TRANSFER:

USB Port



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WEIGHT & DIMENSIONS:

DISPLAY:

Weight: 1.4 lbs (64 g)
Length: 10.52 in (26.7 cm)
Width: 7.4 in (18.7 cm)
Thickness: .34 in (.86 cm)

HEAD:

Weight: 5.7 lbs (2.6 kg)
Length: 15.0 in (38.1 cm)
Width: 4.3 in (10.9 cm)
Height: 6.8 in (17.3 cm)

SUPPORT:

Weight: 18.7 lbs (8.5 kg)
Length: 12.5 in (31.8 cm)
Width: 9.7 in (26.4 cm)
Height: 5.8 in (14.5 cm)

CHARGER:

Weight: 7.7 lbs (3.5 kg)
Length: 13.5 in (34.25 cm)
Width: 9.7 in (14 cm)
Height: 3.7 in (9.5 cm)



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