

MODEL

131/132 Gas Chromatograph

TCD-based chromatograph measures up to 16 components including hydrocarbons, CO₂, N₂, and H₂S for the natural gas processing industry.

APPLICATIONS

BTU	Specific Component Concentrations
Specific Gravity	Compressibility
Wobbe Index	
High range H ₂ S & CO ₂ at plant inlets or field stations	

FEATURES

- Ranges from 0–500 ppm to 0–100%
- <0.5 BTU Repeatability
- Windows®-based interface
- Data Logging standard
- Serial Communications: RS-232, RS-485, Ethernet
- Dual 4–20 mA outputs
- Configurable Modbus
- 10-port Injection valve
- Thermistor-based TCD
- No Instrument air required
- Three-Stream capability and auto calibration

VALUE

The 131/132 offers state-of-the-art electronics at a very competitive price. The 131/132 is designed to be a rugged and simple to operate platform for process measurements.

The TCD and injection valve and columns utilized in the 131/132 are time-proven devices. The electronic platform is unique to the 131/132 analyzer and provides on-line, real-time analysis as well as a full list of configurable features for data handling, alarm functions and special calculations. The Windows®-based configuration software allows the user to view recent or saved chromatograms as well as adjust the analyzer configuration.



Model 131 Class 1, Div 1

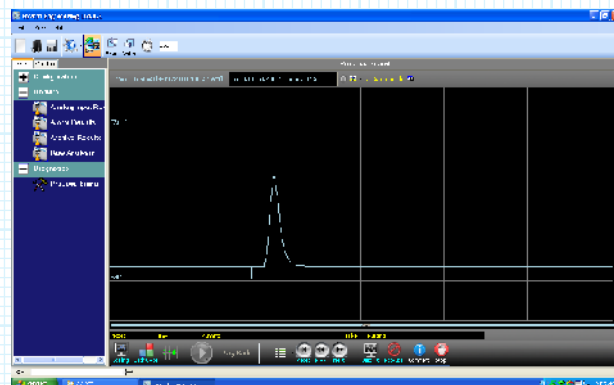
SPECIFICATIONS

Power	24 VDC @ less than 30 watts, 120/220 VAC optional Class 1, Div1 Grps C & D (Model 131) Class 1, Div2 Grps C & D (Model 132)
Ambient	0–50°C (std) consult factory for other requirements
Measurement Ranges	0–500 ppm to 0–100% for up to 16 components
Response time	Application-dependent. 2 component (H2S/CO2), 3 minutes. Heating value (BTU) to C6+ using a single injection valve (6 minutes). 3 minutes with high speed option (2 valve)
Accuracy	1% of reading for concentrations over 1%
Inputs	TCD detector, oven temperature control sensor 4 dry contacts
Outputs	Dual isolated 4–20 mA, (loop power required) One RS-232 & Three RS-485 Ethernet Port (configuration or TCIP Modbus) Four 5 amp SPDT alarm relays
Displays	2 x 16 character LCD with back lighting Menu is scrolled by internal button or external magnetic switch (Class 1, Div1) Menu includes component values, Heating values (BTU or other units), specific gravity, Wobbe Index, Compressibility, specific heat ratios
Weight	Model 131 60 lbs Model 132 30 lbs
Data Logging	24,000 data points, user-selectable values and frequency
Dimensions	131- 36" high by 24" wide panel 132- 36" high by 24" wide panel
Auto Calibration	Allows user to initiate a calibration based on time or external input

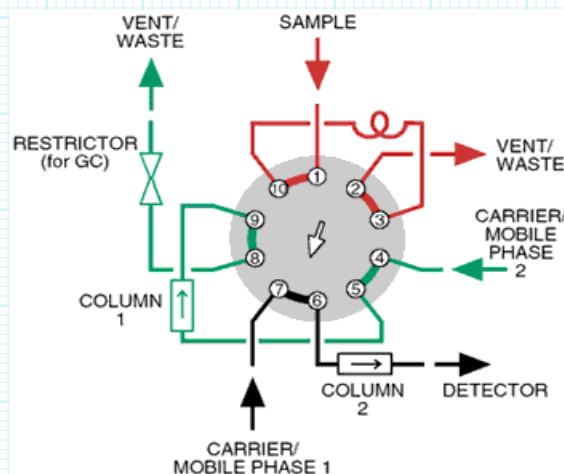
OPTIONAL EQUIPMENT

Additional Stream Switching	Allows switching of two input streams
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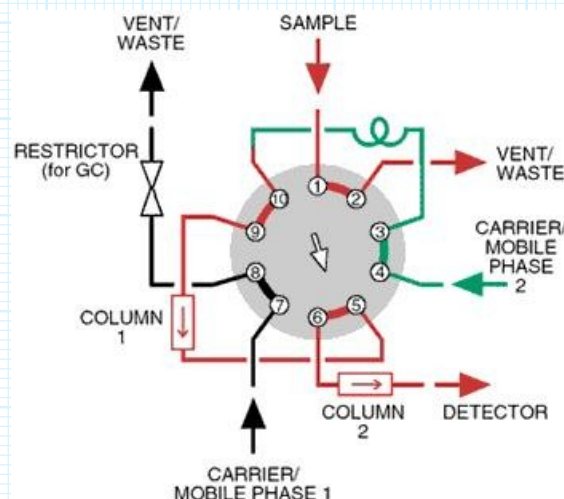
The 10-port valve is rated for 1 million injections. The 131/132 can be fitted with one or two columns depending on components of interest. For heating values based on C6+, column 1 lets all components pass except C+ and heavier and column 2 measures all other lighter components. The heavier components are measured as a backflush peak during the sample injection part of cycle. Analysis time with single valve for C6+ will be 6 minutes for the one valve configuration, 3 minutes for the two valve configuration. Analysis time for single or dual components will vary from 2 to 3 minutes.



Windows® -based GUI



10-port Valve Position 1



10-port Valve Position 2