

131/132 GC

MODEL 131/132 Gas Chromatograph

TCD--based chromatograph measures up to 16 components including hydrocarbons, CO_2 , N_2 and H_2S for the natural gas processing industry.

APPLICATIONS

BTU Specific Gravity Wobbe Index Specific Component Concentrations Compressibility

High range H₂S & CO₂ 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
- Dual 4–20 mA outputs
- Configurable Modbus
- 10-port Injection valve
- Thermistor-based TCD
- No Instrument air required
- Dual-Stream capability and 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 timeproven devices. The electronic platform is unique to the 131/132 system and provides on-line, real-time analysis as well as a full list of configurable features for data handling, alarm functions and special functions. The Windows®-based configuration software allows the user to view recent or saved chromatograms as well as configure the analyzer for the application.



Model 131/132 Class 1, Div 1



Envent Engineering Ltd.

131/132 GC

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 H_2 S-only (2 minutes), H_2 S & CO ₂ only (3 minutes), Heating value (BTU) to C6+ using a single injection valve (10 minutes)
Accuracy	1% of reading for concentrations over 1%
Inputs	Temperature-controlled TCD Sensor
	4 dry contacts
Outputs	Dual isolated 4–20 mA, (loop power required)
	One RS-232 & Three RS-485
	Four 5 amp SPDT alarm relays
	Four solid state solenoid drivers
Displays	2 x 16 character LCD with back lighting
	Menu is scrolled by internal button or external magnetic switch (Class 1, Div1) $% \left(\frac{1}{2}\right) =0$
	Menu includes component values, Heating values (BTUs or other units), specific gravity, Wobbe Index, Compressibility, specific heat ratios
Weight	Model 131 60 lbs (mounted on 24" by 36" panel) Model 132 30 lbs (mounted on 24" by 36" panel)
Data Logging	24,000 data points, user-selectable values and frequency
Dimensions	131- 36" high by 24" wide panel weight: 65 lbs
	132- 36" high by 24" wide panel weight: 40 lbs
Auto Calibration	Allows user to initiate a calibration based on time or external switch

OPTIONAL EQUIPMENT

Additional	Allows switching of two input streams
Stream	
Switching	

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 back flush peak during the sample injection part of cycle. Analysis time with single valve for C6+ will be 10 minutes. Analysis time for single or dual components will vary from 2 to 3 minutes.

