KONTROL ANALYTIK

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K1000 ON LINE HYDROCARBON ANALYZER

Contrôle Analytique, a leading manufacturer of trace gas analyzers since 1995, is now offering the K1000 hydrocarbon analyzer. The K1000 is now up to date with a new microprocessor platform that enables it to be remotely controlled from inside any area network and even Internet. This Internet connection is a very interesting feature. K1000 can be remotely controlled from everywhere by operators without being on site and allows Contrôle Analytique technicians to support those operators when they are in troubleshooting.

FEATURES

- Guaranteed 10 ppb resolution
- Easy to operate
- Real Time Clock
- Alarm Historic
- Internet / Web Enable
- Graphic display
- All flow electronically regulated
- Temperature regulated
- Could be use with a methanizer for CO and CO_2 measurement

APPLICATIONS

- Air separation plants
- Semiconductor industries
- Speciality gas laboratory
- Environment
- Hydrocarbon measurement in hydrogen
- EPA method 25 capability

CONTRÔLE CAI ANALYTIQUE

ANALYTICAL SYSTEMS

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User interface:

The K1000 has a very simple and intuitive user interface. The user interface allows the user to see real time measurements, system status and other important values. Like all Contrôle Analytique analyzers, it offers the “Lock Range”. The “Lock Range” allows the operator to lock the K1000 in a desire range. This is very important when using the 4-20 mA output since this output is in relation with the active range. The K1000 also provides an automatic ranging feature. When the analyzer is in this mode, it changes the range according to the measured impurities. Moreover, the software has diagnostic menus that allow the user to get important information like calibration parameters, PID constants, Ethernet parameters and alarm historic with date and time.

Industrial I/O:

Many plants still use the standard 4-20 mA output as the way to transmit process value to a remote system. The K1000 provides a 4-20 mA output for the calculated impurity.

4-20 MA OUTPUT CHARACTERISTIC:

- Maximum load impedance: 550 Ohms
- Fuse protected
- Transient protected
- Isolated from power ground and analyzer electrical circuit
- Analog output can be programmed to be over driven or under driven in case of a system alarm. This is a useful for older plants that have to be retrofitted.
- The 4-20 mA output can be manually driven to calibrate remote monitoring system as for troubleshooting.

Internet enable:

The K1000 is web enable. It can be remotely controlled using a standard web browser. By entering the IP address indicated in the K1000 Ethernet Info menu into a web browser, you get full control of the analyzer. All menus are accessible.

It allows a Contrôle Analytique technician to diagnose a problem without being on site.

Detector:

The K1000 F.I.D. detector was reworked to improve its sensibility. With this new detector, we can now get more accurate measurements and it provides a cleaner operation then the previous one. Furthermore, its F.I.D. detector can be used in a K4000^{NG} for CO, CO_2 measurement (when used with our high performance methanizer), CH_4, NMHC and all other typical F.I.D. measurements can be achieved.

• SPECIFICATIONS

DETECTOR TYPE: High performance Low Noise Flame ionization detector sub system

RANGE: 0-1, 0-10, 0-100 ppm range (other ranges possible)

SENSITIVITY: ≤ 10 ppb, less than 1% full scale (with temperature drift and pressure compensation)

GAS FLOW:

Recommended Flow:
- H2: 20 – 25 cc/min
- Air: 150 – 250 cc/min
- Sample: 10 – 40 cc/min at 5 to 40 PSIG (34 to 276 kPa)

NOTE: AIR AND H_2 MUST BE HYDROCARBON FREE. THE USE OF HYDROCARBON TRAP ON CYLINDER IS RECOMMENDED. ALL FLOWS ARE DISPLAYED ON LCD SCREEN AND CONTROLLED BY HIGH PRECISION ELECTRONIC PRESSURE REGULATORS. H_2 AND AIR REQUIRE THAT INLET PRESSURE IS 80 TO 100 PSIG (552 TO 690 KPA)

DETECTOR TEMPERATURE: 150 °C

OPERATING TEMPERATURE: 10 to 35 °C

GAS CONNECTION: 1/8'' compression fittings and 1/4'', compression fittings for detector vent

NOTE: WATER COMES OUT OF DETECTOR VENT. A DOWN SLOPE LINE MUST BE USED TO AVOID WATER ACCUMULATION. KEEP IT AT AMBIENT TEMPERATURE TO AVOID FREEZING.

SUPPLY: 115 Vac/50-60 Hz or 220 Vac 50-60 Hz (on order)

FUSE: Two fuses 2 amp / 250 V, Little fuse <<F>>, fast acting miniatures fuses, 5 x 20 mm

NOTE: FOR VOLTAGE SPIKES OVER 2 KV ON POWER INLET THE FUSES WILL OPEN DUE TO VARISTOR PROTECTIONS INSIDE THE UNIT.

POWER CONSUMPTION: Maximum 125 watts

DIMENSIONS:
- Standard rack mount 3U
- 5.25'' high, 18'' deep, 19'' wide

WEIGHT:
- 15 kg (33 lbs)

STANDARD FEATURES:
- Real Time Clock
- Fully microprocessor-controlled, with graphic color display
- Self-diagnostic system software
- Fully remote controllable through Ethernet/Internet.
- Alarm Historic
- Manual or autoranging (user selectable)
- Digital ouputs for remote monitoring:
  (all dry relay contacts, SPST 1 amp 250 Vac resistive load)
  - System status (1 output)
  - Range in use (3 output)
  - 2 alarm outputs (user programmable set point)

OPTION:
- Built-in auto-calibration (include valves)
- 4-20 mA isolated output
- Maximum load impedance: 600 ohms at 20 mA DC
- Isolation: 750 VDC or AC peak maximum
- Serial port: RS-232 / 422 / 485 / modem
- Custom option: contact factory

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