Microprocessor Based IR Photometer
Model CGA IR 4120

Continuous Gas Analyzer

Single or Dual Component

Ref:CGAIR4120IntE

DESCRIPTION

The Model 4120 is a single or dual component non-disperse infrared (NDIR) gas analyzer used for measuring CO, CO_2, CH_4, and SO_2. It (Insert) achieves high accuracy and provides multiple function and ease of operation through the use of a microprocessor. It is available in 19-inch rack, panel or tabletop mountings. Zero and span calibrations are easily accomplished by pressing the appropriate key on the front panel.
The 4120 has an improved single beam optical system, which provides superior performance to conventional double beam analyzers. It is easy to maintain and offers excellent long-term stability. The 4120 is ideal for continuous measurement in the combustion control of burners, incinerators and furnaces as well as CEM-stack systems. The dual cell type of transmission detector minimizes interferences from other gas components from other gas components.
The 4120 optical design and modular construction assures long term reliability.

FEATURES

- Microprocessor controlled
- Single source, single beam optics
- Direct readout in engineering units
- Linear output
- Low sensitivity to vibration
- 1 or 2 components, multiple ranges
- Self diagnosis function
- No optical alignment required
- RS-232C/RS485 interface
- IEEE1451.2 STIM
- Easy maintenance
- 19" rack mountable

OPTIONS

- Auto calibration
- Remote range change and range identification output
- Barometric pressure compensation

APPLICATIONS

- Combustion efficiency:
  Boilers, incinerators & furnaces (CO, CO_2, SO_2)
  Commercial ovens (CO, CO_2)
- Controlled atmospheres:
  Heat treating (CO, CO_2, CH_4)
  Greenhouses (CO_2)
  Fermentation (CO_2)
  Air liquidification (CO_2)
- Landfill emissions (CO_2, CH_4)
- Process chemical gas analysis
- Respiration studies:
  Single breath lung diffusion (CO)
- Stack gases: CEM (CO, CO_2, SO_2)
- Vehicle emissions

SPECIFICATIONS

MEASURABLE GAS COMPONENTS
Single component, multiple range analyzer: CO_2, CO, CH_4, and SO_2...
Two-component multiple range analyzer: Any two ranges: Up to 3 ranges (optional)200 ppm to 100%
Range: maximum 10 to 1
MEASURING SYSTEM: Non Disperse infrared absorption (NDIR) method, singe light source-single beam
OUTPUTS: Analog 0/4 to 20mA DC, and 0 to 2.5V or 0 to 5V DC
Communication: RS-232C, or RS485 selectable
REPEATABILITY:
1st range (low range): Within ± 0.5% of full scale
2nd range (high range): Within ± 1% of full scale
ZERO DRIFT: Within ± 1% of full scale/24 hrs
SPAN DRIFT: Within ± 1% of full scale/24 hrs
RESPONSE TIME: Within 3 seconds, depending on cell length and flow rate
LINEARITY: ±0.1% of full scale
NOISE: ± 0.5% of full scale
POWER SUPPLY: 110, 220 (± 10%) VAC, 50/60 Hz
POWER CONSUMPTION: 37VA max.
AMBIENT TEMPERATURE: -5 to +45° C (23-113° F)
AMBIENT HUMIDITY: Less than 90% RH (non-condensing)
ENCLOSURE: Coated steel casing, for indoor use
DISPLAY: 2x16 LCD
OUTPUT HOLD: Output value can be held during manual or automatic calibration function
MEASURED GAS TEMPERATURE: 32-122° F (0 to 50° C) ;20-50° C for water vapor applications
WARM-UP TIME: Approximately 1 hour
GAS INLET/OUTLET, PURGE GAS INLET SIZE: NPT ¼" internal thread
MEASURED GAS FLOW RATE: 0.5 to 2 liters/min.
PURGE GAS FLOW RATE: 1 liter/min.
DIMENSIONS:
Rack Mount: 133mm x 483mm x 448mm
WEIGHT: Approximately 12 kg

Odering Information

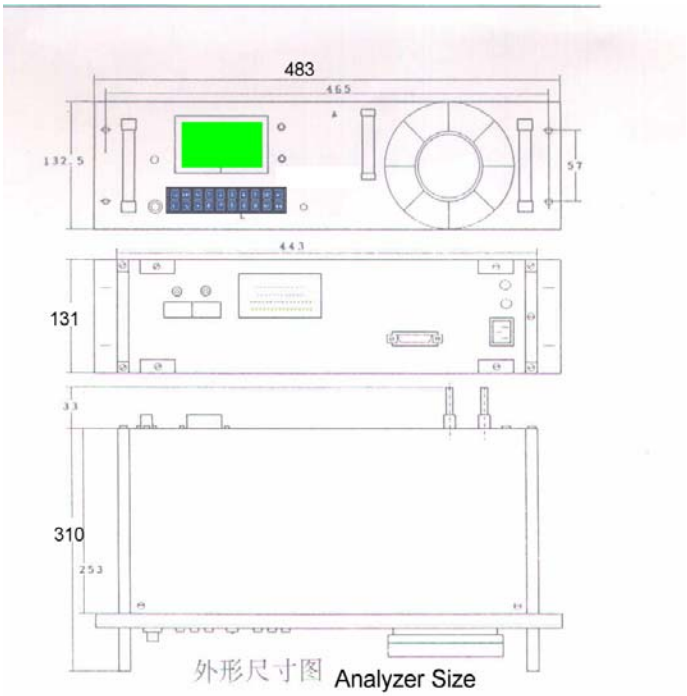
1. Specify Gas ingredients
2. Test range
3. Concentration flunctuation
4. Others like pressure and temerature
5. Accessories
6. Communication protocol
7. Other requirements

Included Parts

1. Analyzer: 1
2. Spares: 1 suit

OPTIONS:

- Standard Gas: 1bottle(by order)
- Pressure regular suits: 1 (by order)



Specifications subject to change without notice

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