

Laser Gas Analyzer

A flame proof tunable laser gas analyzer based on TDLAS technology, which can in-situ analyze O2, CO, NH2, CO2, CH2, H2O, HCl, HF and other gases in various complex conditions. It consists of transmitter, receiver and connection box. The transmitter drives the tunable diode to emit laser of certain wavelengths, which passes through the environment to be measured, then reaches the receiver. The receiver performs photo electricity conversion, signal processing and spectrum data analysis to obtain the measuring result. The connection box contains I/O interface, making the connection of power cable and signal cable convenient.

Specification Parameters - 100

| Technical indication | | | |
|------------------------|---|--|--|
| Optical Channel Length | 20m | | |
| Linearity Error | $\pm 1\%$ F.S. | | |
| Repeatability | 1% | | |
| Span Drift | ±1%F.S.I half year | | |
| Zero Drift | ±1%F.S.I half year | | |
| Maintenance Cycle | 2 times/year, clean optical window | | |
| Calibration Cycle | 2 times/year | | |
| Type of Protection | Exdii CT 6Gb | | |
| Enclosure Rating | IP66 | | |
| Response Time(T) | Is | | |
| | Interface signal | | |
| Analog output | 2x4-20mA output (Isolation, max load 7500) | | |
| Analog Input | 2x4-20mA input (temp. and press. Compensation) | | |
| Digital Output | RS48S/RS232/GPRS | | |
| Relay Output | 2 (24V,1A) | | |
| | Operating Conditions | | |
| Power Supply | 24VDC,<20W | | |
| Purge Gas | 0.3 MPa- O.S MPa industrial nitrogen, purification instrument air, etc. | | |
| Ambient Temperature | 20'C - + 60'C | | |
| | Installation | | |
| Installation Way | In-situ installation | | |

Specification parameters - 106

| Technical Indication | | |
|----------------------|--------------------------------------|--|
| Linearity Error | l% F.S | |
| Repeatability | 1% | |
| Span Drift | l% F.S half year | |
| Zero Drift | 1%F.S./half year | |
| Calibration Cycle | 2 times/year | |
| Type of Protection | Ext!ICT6Gb | |
| Enclosure Rating | IP66 | |
| Preheating Time | 15 minutes | |
| Response Time(T00) | 30s(related to the working condition | |
| Interface Single | | |
| Analog Output | 2x4-20mAoutput(isolation,maxload7500 | |
| Analog Input | 2x4-20mA input (temp. and press. | |
| | Compensation) | |
| Digital Output | RS485/RS232/GPRS | |
| Relay Output | 3(24V,lA) | |

| Operating Condition | |
|---------------------|---|
| Power Supply | 24VDC, <20W(without pretreatment system |
| | components) |
| | |
| Purge Gas | 0.3MPa 0.8MP a industrial nitrogen, |
| | purification instrument air, etc |
| Ambient Temperature | -20't-+60't |
| Installation | |
| Installation Way | By-pass type installation |

Specification parameters 150

| Technical Indication | | | |
|-------------------------------|---|--|--|
| Linearity Error | l% F.S | | |
| Span Drift | l% F.S half year | | |
| Zero Drift | 1%F.S./half year | | |
| Maintenance Cycle | 2times/year, clean optical window | | |
| Calibration Cycle | 2 times/year | | |
| Type of Protection | Ext!ICT6Gb | | |
| Enclosure Rating | IP66 | | |
| Central Unit Enclosure Rating | IP54 | | |
| Interfa | Interface Single | | |
| Analog Output | 2x4-20mAoutput (a single measurement | | |
| | probe) | | |
| | Sx4-20mAoutput (central unit, optional) | | |

| Analog Input | 2x4-20mA input (temp. and press. |
|----------------|----------------------------------|
| | Compensation) |
| Digital Output | RS485/RS232/GPRS |
| Relay Output | 2(a single measurement probe) |
| | 8(central unit, optional) |

| Operating Condition | | | |
|-------------------------------|---|--|--|
| Measurement unit Power Supply | 24VDC, 20W | | |
| Central Unit Power Supply | 100VAC-240VAC | | |
| Purge Gas | 0.3MPa 0.8MPa industrial nitrogen, purification instrument air, etc | | |
| Ambient Temperature | -20't-+60't | | |
| Insta | Installation | | |
| Measurement Unit Installation | In-situ installation | | |
| Central Unit Installation | Wall or plate mounted | | |

Specification parameters – 180

| Technical Indication | | |
|----------------------|--|--|
| Linearity Error | 1% F.S | |
| Repeatability | 1% | |
| Span Drift | l% F.S half year | |
| Zero Drift | 1%F.S./half year | |
| Maintenance Cycle | 2times/year, (related to the working | |
| | condition) | |
| Calibration Cycle | 2 times/year (or automatic calibration) | |
| Enclosure Rating | IP54 | |
| Response Time(T) | 30s(related to the working condition) | |
| Interface Single | | |
| Analog Output | 2x4-20mA output (isolation, max load 7500) | |
| Analog Input | 2x4-20mA input (temp. and press. | |
| | Compensation) | |
| Digital Output | RS485/RS232/GPRS | |
| Relay Output | 3 (24V,1A) | |

| Operating Condition | | |
|---------------------|--|--|
| Power Supply | 100VAC-240VAC | |
| Purge Gas | 0.3MPa 0.8MPa industrial nitrogen, purification instrument air, etc. | |
| Ambient Temperature | -20't-+60't | |
| Installation | | |
| Installation way | Sampling installation | |

Specification parameters – 200

| Specification parameters 200 | | |
|------------------------------|--|--|
| Technical Indication | | |
| Linearity Error | l% F.S | |
| Repeatability | 1% | |
| Span Drift | l% F.S half year | |
| Zero Drift | 1%F.S./half year | |
| Maintenance Cycle | 2times/year, (clean optical window) | |
| Calibration Cycle | 2 times/year (or automatic calibration) | |
| Type of protection | BxdiiB+H,TSGb | |
| Enclosure Rating | IP65 | |
| Preheating time | 15 minutes | |
| Response Time(T) | 30s(related to the working condition) | |
| Interface Single | | |
| Analog Output | 2x4-20mA output (isolation, max load 7500) | |
| Analog Input | 2x4-20mA input (temp. and press. | |
| | Compensation) | |
| Digital Output | RS485/RS232/GPRS | |
| Relay Output | 3 (24V,1A) | |
| | | |

| Operating Condition | | |
|---------------------|-----------------------|--|
| Power Supply | 100VAC-240VAC | |
| Ambient Temperature | -20't-+55't | |
| Installation | | |
| Installation way | Sampling installation | |

Specification parameters - 350

| Technical Indication | | | |
|----------------------|--|--|--|
| Linearity Error | 2% F.S | | |
| Repeatability | 1% | | |
| Span Drift | 2% F.S half year | | |
| Zero Drift | 2%F.S./half year | | |
| Maintenance Cycle | 2 times/year, (clean optical window) | | |
| Calibration Cycle | 2 times/year | | |
| Enclosure Rating | IP54 | | |
| Response Time(T) | 30s (related to the working condition) | | |
| Interfac | Interface Single | | |
| Analog Output | $2x4$ -20mA output (isolation, max load 750 Ω) | | |
| Analog Input | 2x4-20mA input (temp. and press. | | |
| | Compensation) | | |
| Digital Output | RS485/RS232/GPRS | | |
| Relay Output | 2(24V,1A) | | |

| Operating Condition | | |
|---------------------|--|--|
| Power Supply | 24VDC or 220VAC | |
| Purge Gas | 0.3 MPa 0.8 MPa industrial nitrogen, purification instrument air, etc. | |
| Ambient Temperature | -20't-+60't | |
| Ii | nstallation | |
| Installation way | Sampling installation | |