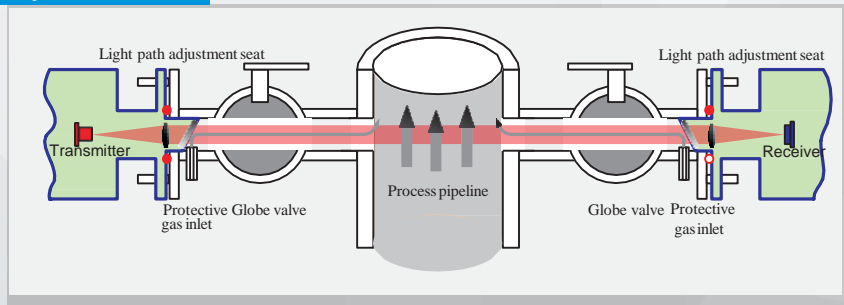


# ▶▶ GALGT-2 Tunable Diode Laser Gas Analyzer – In-Situ

GALGT-2 is a flameproof tunable laser gas analyzer for industrial online analysis and environmental on-line monitoring, which can in-situ analyze O<sub>2</sub>, CO, NH<sub>3</sub>, CO<sub>2</sub>, CH<sub>4</sub>, H<sub>2</sub>O, 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 photoelectricity 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.



## System Composition

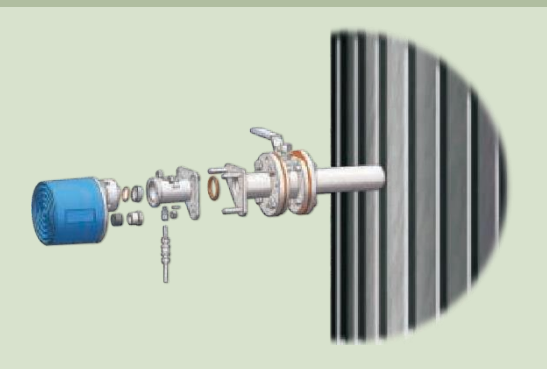


## Features

- Easy optical path adjusting, XY direction non-coupling adjusting.
- Small drift, long maintenance period, drift  $\leq \pm 1\% \text{F.S.} / \text{half year}$ .
- Single line" spectrum technology, free from interference of background gas.
- Integrated structure design, high stability and reliability.
- Integrated flameproof structure, consuming less purge gas compared with positive-pressure mode.
- In-situ measurement without pretreatment system avoids adsorption, blockage and damage, reduces cost.

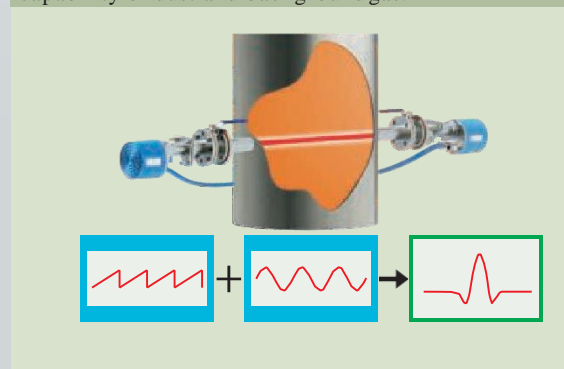
### Easy Maintenance

Modular design, laser module field replaceable, easy maintenance



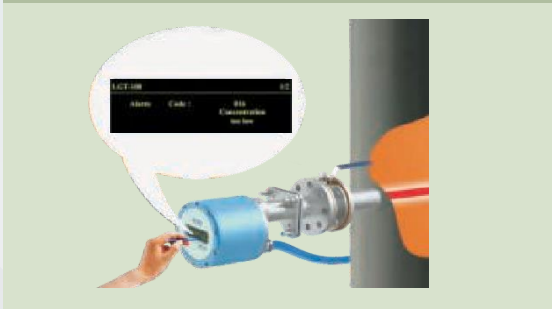
### Strong Anti-Interference Capability

Adopting wavelength-modulation-spectroscopy allows better signal/noise ration & anti-interference capability of dust and background gas.



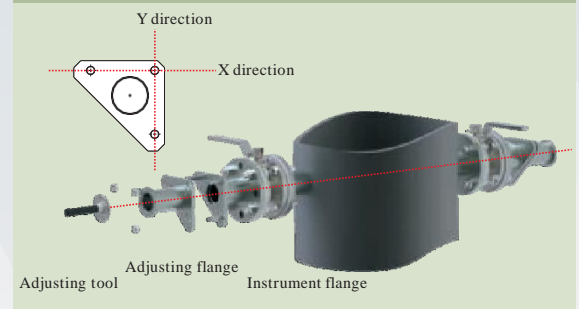
## Self Diagnose Function

Comprehensive self diagnose function, records and saves alarm information, easy to check



## Easy Optical Path Adjusting

XY direction non-coupling adjusting, easy adjusting



## Specification Parameter

### Technical Indicators

Optical Channel Length	≤20m
Linearity Error	≤±1% F.S.
Repeatability	≤1%
Span Drift	≤±1% F.S./half year
Zero Drift	≤±1% F.S./half year
Maintenance Cycle	≤2times/year, clean optical window
Calibration Cycle	≤2times/year
Type of Protection	ExdIICT6 Gb
Enclosure Rating	IP66
Response Time(T <sub>90</sub> )	≤1s

### Interface Signal

Analog Output	2× 4-20mA output(Isolation, max load750Ω)
Analog Input	2× 4-20mA input(temp. and press.compensation)
Digital Output	RS485/RS232/GPRS
Relay Output	2 (24V,1A)

### Operating Conditions

Power Supply	24VDC, <20W
Purge Gas	0.3MPa~0.8MPa industrial nitrogen, purification instrument air, etc.
Ambient Temperature	-20°C ~ +60°C

### Installation

Installation Way	In-situ installation
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## Installation Dimensions

- Purging unit consists of filter and device to stabilize flow, provides stable purge flow to avoid glass contamination.
- Receiver is equipped with OLED screen, operated by magnetic pen.
- Transmitter and receiver is installed on each side of the flue gas pipe through connection flange.
- The connection box contains I/O interface, making the connection of power cable and signal cable convenient.

