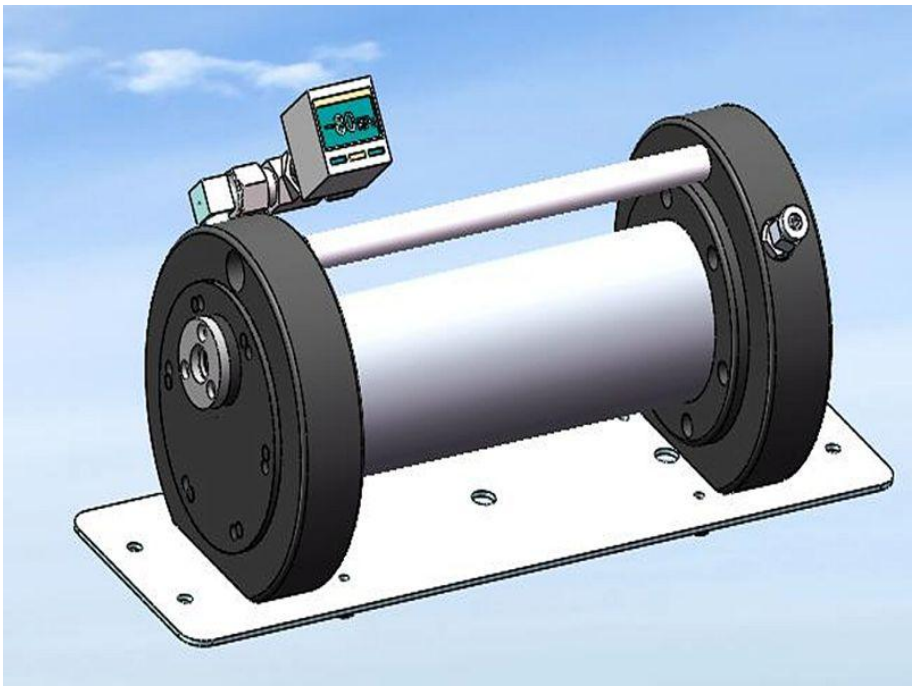
15m long optical path gas absorption cell



Product Description

According to the tunable semiconductor laser absorption spectroscopy technology (TDLAS), a Herriott cell concave reflector is used to build a multi-reverse cavity long optical path gas cell. The reflective lens is plated with high-quality gold, silver and protective layer coating, which has high reflectivity. The compact design provides a relatively long absorption light path. The high-precision optical cavity gas cell is made of high-quality corrosion-resistant materials as a whole. It is suitable for industrial product application development, high-sensitivity gas analysis, major universities, scientific research, online environmental monitoring, etc. The standard light source collimator can be directly installed, and the interface is M11X0.5 thread. There is no need to add an external reflector or adapter adjustment to align the light, which is very convenient to use.

Part Number

HT-15L

● Product features

The air chamber structure is ultra-stable and has strong vibration resistance、Small size, compact structure, easy to carry、 15-meter long effective optical path、 Input and output are coupled with standard single-mode optical fiber

● Application area

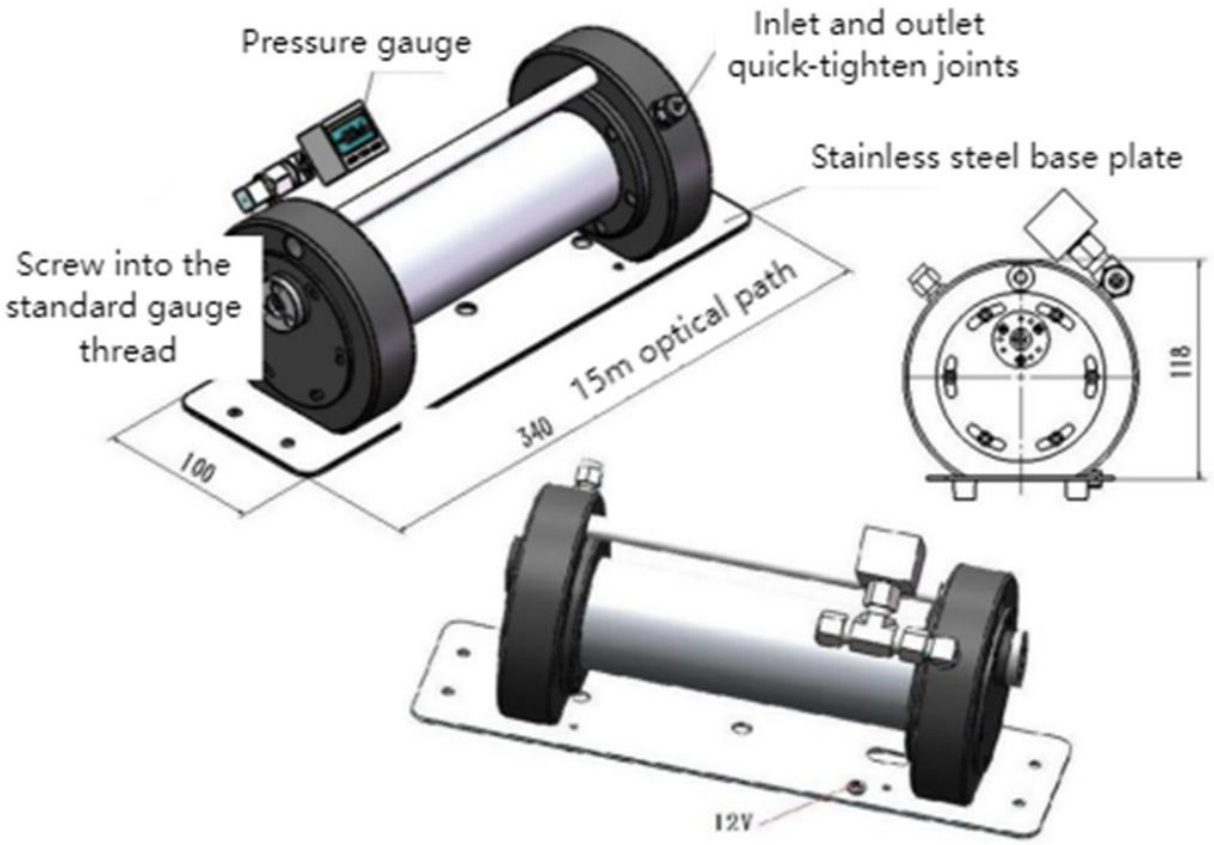
Monitoring tasks in industrial environments、 Infrared absorption spectroscopy in scientific research、 Industrial online monitoring

Parameter

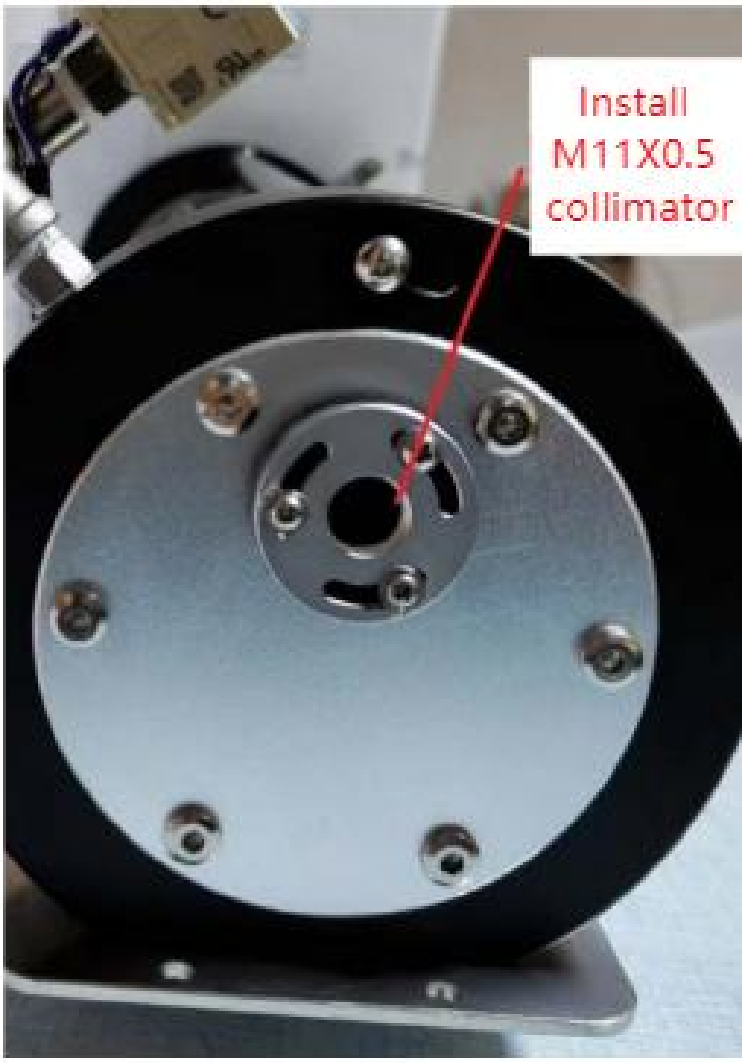
Effective optical path	15 meters
Beam diameter	≤3.5mm
Mirror coating	Gold/silver plating and protective film
Wavelength range	750～3000um
Gas cell volume	0.8L (one standard atmospheric pressure)
Working gas pressure	-100KPa～100KPa
Window material	CaF2
Gas connector	Φ6 quick connector
Dimensions	0.34X0.10X0.12(M)

Product access operation

1 Insert the DC transformer configured with the gas pressure gauge into the 220V power supply, and the gas pressure gauge will show a value. Connect the inlet and outlet joints, close the inlet valve, and evacuate the gas in the cell. When the pressure gauge shows a negative value, close the outlet valve; open the inlet valve, and do not inject more than 0.2MPa of the test gas.



2 Connect the collimator standard interface M11X0.5 thread, turn on the laser, and the reflected light source will be emitted from the tail end of the cell.


Install
M11X0.5
collimator

3 Turn off the power immediately after use

Notice: 1. The gas entering the gas pool must be filtered gas, and the gas after detection must be evacuated to ensure that the pool is clean.

2. Do not disassemble the gas seal and the fixed parts of the light in and out.

3. Do not look directly into the light outlet!