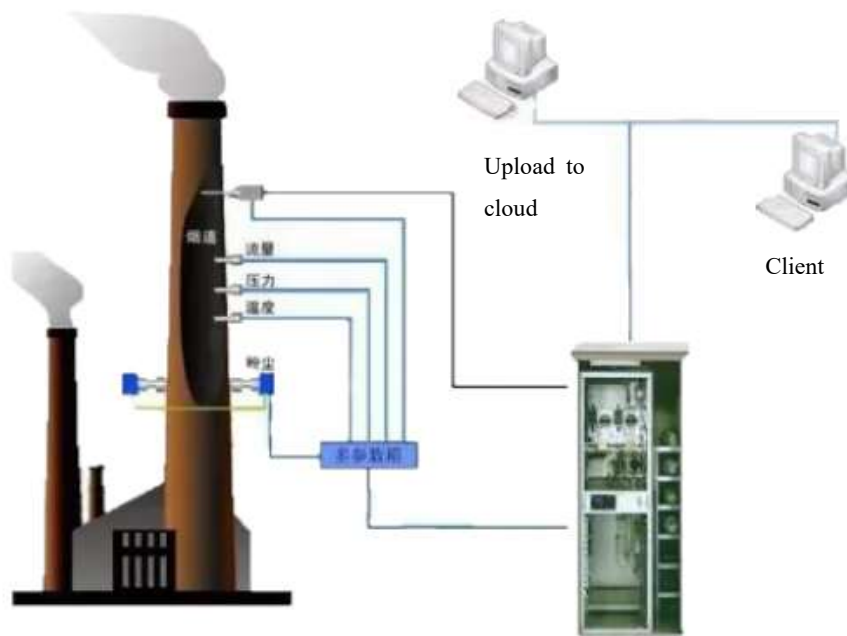


System introduction



The WLB flue gas emission continuous monitoring system (in-place type) consists of four parts (including smoke monitoring subsystem, gaseous pollutant monitoring subsystem, flue gas parameter monitoring subsystem and system control and data acquisition and processing subsystem). It can be used to monitor the parameters (such as SO₂, NO_x, O₂, dust, temperature, pressure and flow velocity) in the gas, and for extended monitoring of such parameters as HCl, HF, CO, CO₂ and humidity in the specific occasion. The measured gas is subject to dedusting by the sampling probe and directly enters the high-temperature gas analysis module (DOAS technology) for analysis and measurement. It's free from tracing pipe and condenser with quick response and effectively solves the technological problems (such as low measurement result arising from SO₂ absorbed by the water precipitation based on the condensation method, and has a significant advantage especially in low concentration measurement occasions

System features

- The extraction condensation method is used and the extraction condensation method CEMS is capable of measuring SO₂, NO_x, O₂, temperature, pressure, flow rate, humidity and dust;
- As for SO₂ and NO_x, the high-temperature tracing heat ultraviolet differential optical absorption spectroscopy (DOAS) analysis technology is used;
- The zirconia or electrochemical process is used for O₂;
- The high temperature capacitance method is used for humidity;
- The thermistor (PT100), pressure sensor and pitot tube micro differential pressure method are used for temperature, pressure and flow rate, respectively;
- The laser backscattering method is used for dust;
- It has such advantages as accurate measurement, high reliability, low investment cost and quick response;
- Supporting online calibration, small measurement value fluctuation, high reliability and simple equipment.
- It has the advantages, such as convenient installation and commissioning and low requirement of site facilities.
- The whole machine is of compact structure with convenient transport and installation.

System parameters



- SO₂: 0~50~1000ppm;
- O₂: 0~25%;
- NO_x: 0~50~1000ppm;
- Humidity: 0~40%;
- Dust: 0~10mg/m³ 0~50mg/m³;
- Flow rate: 0~40m/s (customizable);
- Temperature: 0~300°C (customizable);
- Pressure: -10kPa~+10kPa (customizable);
- Size: 580mm×290mm×1060mm;
- Tracing heat temperature: 120°C;
- Protection grade: Equipment cabinet: IP42, others: IP65;
- Power supply: 220VAC,2000W;
- Operating temperature: -10°C~+50°C;
- Operating humidity: 0~95%RH(no condensation)
- Compressed air requirements: (0.4 ~ 0.8)MPa,0.25m³/min; Clean, oil-free and water-free

Weight	About 150kg
Measurement parameter	SO ₂ , NO _x , O ₂ , temperature, pressure, flow rate, humidity and dust
Heat tracing pipe temperature	120°C~200°C
Probe tracing heat temperature	120°C~200°C
Protection grade	Equipment cabinet: IP42, others: IP65
Power supply	220VAC,3000W
Ambient temperature	-20°C~50°C
Ambient humidity	5%Rh ~ 95%Rh (no condensation)
External output	4-20mA,RS232,RS485
Instruction case	2000x800x800MM (height * depth * width)
Blowback unit (compressed air source, blowback gas circuit and control valve) Pretreatment unit (sampling pump, dehumidification, fine filtration and drainage) Sampling unit (probe, filter and temperature controller)	

System application

The WLB flue gas emission continuous monitoring system is used for real-time acquisition of various parameters (such as SO₂ concentration, NO_x concentration, CO concentration, particulate matter concentration, oxygen content, temperature/humidity, pressure and flow rate). The industrial waste gas treatment equipment is used to promptly monitor whether the hazardous substance in the flue gas emitted by the enterprises exceeds standard and automatically transmit the real-time monitoring data to the superior department and is widely used for exhaust emission monitoring and process control of coal-fired power plant, garbage power plant, cement plant, glassworks, lime factory, ceramics factory, sintering, coke oven, desulfurization process and denitration technology.