



# IR Carbon and Sulphur Analyzer LCSA-A1 Series

IR Carbon and Sulphur Analyzer LCSA-A10 is a unit for determination of sulphur and carbon equipped with two treatment units including a high frequency induction burner and flexible temperature settings with automatic control. With an analysis time of 20 to 100 seconds and a sensitivity of 0.1 ppm the multi-shielded isolation circuit prevents the machine for high frequency interference. High-speed 24-bit sampling improves sensitivity and accuracy.

IR Carbon and Sulphur Analyzer LCSA-A11 is a unit for determination of sulphur and carbon equipped with two treatment units. The analysis parts and furnace parts are designed as one unit. Features a high frequency induction burner and flexible temperature settings with automatic control. With an analysis time of 25 to 60 seconds and oxygen purity of 99.5 %, the multi-shielded isolation circuit prevents the machine for high frequency interference. High-speed 24-bit sampling improves sensitivity and accuracy.

IR Carbon and Sulphur Analyzer LCSA-A12 is a unit for determination of sulphur and carbon equipped with two treatment units including a high frequency induction burner and flexible temperature settings with automatic control. With an analysis time of 25 to 60 seconds and 10 to 30 Â°C, the multi-shielded isolation circuit prevents the machine for high frequency interference. High speed 32-bit sampling improves sensitivity and accuracy.

## Features

- ❑ Ultra-low analysis with double carbon and sulphur ( automated switching )
- ❑ 24-bit sampling for improved accuracy and sensitivity
- ❑ Real time monitoring of carbon and sulphur curve
- ❑ Carbon monoxide to dioxide conversion device
- ❑ Auto cleaning and ultra-micro porous metallic dust filter
- ❑ High precision pyro electric IR detectors
- ❑ Low pressure heating circle for improved sulphur conversion
- ❑ High frequency furnace using optical fiber
- ❑ Internal pressure conceal , air tightness and filtering
- ❑ Statistical data device for counting and online data transfer
- ❑ Automated leakage detection ( overflow alarm )
- ❑ Automatic dust cleaning improves analytical end results
- ❑ High pressure ash discharge for thorough cleaning of dust within pipes

- ❑ Platinum IR light source for continual heating and high spectral efficiency

## Application

Used to measure mass fraction of carbon and sulfur in steel, iron, casting core sand, cement, ore, catalyst, magnetic materials, ceramics, inorganic matter, graphite, refractory materials, battery materials, plants and other materials.

## Specifications

Model	LCSA-A10
Carbon analytical precision	RSD $\leq$ 0.5 %
Sulphur analytical precision	RSD $\leq$ 1 %
Sampling per second	24 times
Relative humidity	< 75 %
Room temperature	10 ~ 30 °C
Sensitivity	0.1 ppm
Carbon detection pool	Can add low carbon pool
Sulphur detection pool	Can add high sulphur pool
Analysis time	35 seconds (can be set 20 to 100 seconds)
Weighing precision	0.0001 g
Power	$\geq$ 2.7 kW
Voltage	220 V
Oscillation frequency	20 MHz
Frequency	50 Hz

Model	LCSA-A11
Carbon measurement	0.0001 % to 10.0000 %
Sulphur measurement	0.0001 % to 3.5000 %
Sampling per second	28 times
Relative humidity	< 90 %

Oxygen purity	≥ 99.5 %
Room temperature	10 ~ 30 °C
Oxygen input pressure	0.18 MPa at 5 %
Sensitivity	0.1 ppm
Carbon detection pool	Can add low carbon pool
Sulphur detection pool	Can add high sulphur pool
Analysis time	35 seconds ( can be set 25 to 60 seconds )
Weighing precision	0.0001 g
Power	≥ 2.5 kW
Voltage	220 V
Oscillation frequency	20 MHz
Frequency	18 Hz

Model	LCSA-A12
Carbon measurement	0.000001 % to 99.99999 %
Sulphur measurement	0.000001 % to 99.99999 %
Sampling per second	32 times
Relative humidity	< 80 %
Room temperature	10 ~ 30 °C
Sensitivity	0.1 ppm
Carbon detection pool	Can add low carbon pool
Sulphur detection pool	Can add high sulphur pool
Analysis time	35 seconds ( can be set 25 to 60 seconds )
Weighing precision	0.0001 g
Power	≥ 2.5 kW
Voltage	220 V
Oscillation frequency	20 MHz
Frequency	18 Hz