# INFRARED CARBON SULFUR ANALYZERS



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Infrared Carbon Sulfur Analyzer is a device that is used to measure the carbon and sulfur content present in the sample. The analyzers burn the sample in the presence of atmospheric oxygen which converts the components into carbon dioxide and sulfur dioxide. These are further detected and quantified by the infrared absorption technique as carbon dioxide and sulfur dioxide absorb infrared radiation at specific wavelengths.

Also known as Laboratory IR Carbon Sulfur Analyzer.

## **LTANA11** INFRARED CARBON SULPHUR ANALYZER

It can fleetly and exactly measure the carbon and sulfur in steel, iron, alloy, nonferrous metals, and other materials.

Radio circuit: The design of high-duty radio circuit and the application of 2.5KVA HF pliotron, frequency: 20MHz. Military-purpose ceramic vacuum tubes and ceramic vacuum capacitors.

HF control circuit: It is used for automatic detection of the electromagnetic valve, the elevation or descent of cylinder and the performance of HF unit. Automatic overtime/overflow alarming system enables the HF furnace to work under normal condition.

The optional current/voltage/power regulator for furnace temperature control: It is applicable to samples of various materials.

Gas path: The high precision flow controller ensures the stability of gas flow as well the gas intake system (such as electromagnetic valves, unions, cylinder hoists) for automatic leakage detection. Dual standard correction for solid and gas.

De-dusting unit: The combustion head self-cleaning device effective for reducing the influence of dust for the result of analysis; ash removing system for the inlet. 0.4  $\mu$ m submicron metal filter secures thorough separation of dust from gas and can be used for a long time with no need of the ultrasonic cleaner.

Analysis channel: Providing channel management features, the carbon and sulfur channels are free to increase, delete and edit, no limit.

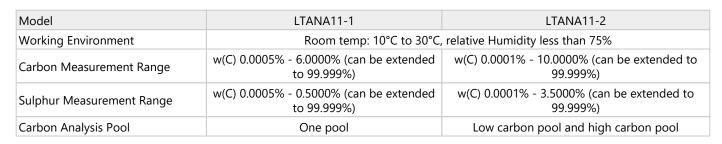
Analysis function: Analysis of the dynamic data, sampling every 20 times, improving the analysis sensitivity and analysis accuracy, providing sample management features, it can edit the sample name and logo, also can increase and delete samples, the software provides a user management system, the administrator setting different user permissions.

Data processing function: Adopt ACCESS data pool store the analysis results, can store all data and curve, Query the analysis results optionally, query according to the time, sample name, logo and operator. Provide some function as data storage, blank deduction, setting parameter, choosing channel, statistics, and curve Compare etc. In the software can create the work curve of carbon and sulfur, realizing the curve fitting.

Self-diagnose function: System diagnosis function, can test furnace head and the gas chamber sealing by the software.

Wide measuring scope, strong anti interference, multiple function.







Sulphur Analysis Pool	one pool	High sulphur pool could be added (Optional)
Carbon Analysis Precision	RSD<1%	RSD<0.5%
Sulphur Analysis Precision	RSD<1.5%	RSD<1%
Time of analysis	25 to 60 seconds, could be adjusted. Around 35 seconds usually	
Sensitivity (The minimum readings)	C/s 0.1 ppm	
Electronic scale	Precision of read: 0.0001g	
Operational Software	WINDOWS XP English operating software	
Display function	The Carbon sulfur has a curve respectively	
Printing function	Print mode is diversification, provides two print modes of laboratory and testing, also can design printing formats	
Sample weight	0.5 g	

### **ACCESSORIES**

Accessory Code	Name	1
1801108008	High frequency automatic inductive combustion furnace	1
1801108009	Electric Balance	1
1801108010	Computer	1
1801108011	Printer	1





LTANA11-1

LTANA11-2

# LTANA11-3 INFRARED CARBON SULPHUR ANALYZER

Advanced User-Friendly interface.

Automatic Diagnosis System

Linearization calibration technology.

Long MTBM (Mean Time Between Maintenance)

Quick and efficient procedure reduces the cycle time and enables the user to enjoy a stress free operation environment.

High Throughput.

Whole machine adopts modular design, highly integrated electronics circuits.

Fully automatic cleaning system with noiseless and vacuum-free dust removal.

Fast and easy maintenance.



### **SPECIFICATIONS**

Model	LTANA11-3
Carbon Measurement Range	0.00001% - 99.99999%
Sulphur Measurement Range	0.00001% - 99.9999%

Carbon Analysis Precision	RSD≤0.5%
Sulphur Analysis Precision	RSD≤1%
Carbon Detection Point	C Pond (can add low C Pond)
Sulphur Detection Point	S Pond (can add low S Pond)
Carrier Gas	Oxygen: Purity ≥99.5% , Pressure: 0.18 MPa ±5%
Operation Gas	Oxygen: Purity ≥99.5% , Pressure: 0.18 MPa ±5%
Time of analysis	20 to 60 seconds adjustable (Usually 35 seconds)
Sensitivity (The minimum readings)	C/s 0.1 ppm
Dimension	540x600x800 mm
Weight	80 kg
Sample weight	0.5 g
Power Supply	AC 220 V ±5%, 50 Hz ±2%



# **Labtare Analytical Instruments**

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