



CHNS Analyzer CHNS-3628



EPC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net



CHNS-362

By incorporating state-of-the-art hardware and software technology with key improvements in overall instrument performance and reliability, the CHNS-3628 series allows you to achieve rapid and precise results in diverse organic matrices from food to fuels. For optimum versatility, this instrument is available in flexible configurations—nitrogen/protein, carbon/nitrogen, and carbon/hydrogen/nitrogen. Shown with Optional Sulfur Module.

Rapid Analysis Times and Integrated Automation

Maximize Throughput While Keeping Cost-Per-Analysis Low

- Unique combustion gas handling and aliquot dosing system significantly extends the lifetime of the reagents used, lowering cost-per-analysis and instrument downtime, while eliminating the need for chromatographic separation techniques and other costly whole gas analyses.
- Simple, gravity-fed autoloader allows for unat-tended analysis, while increasing long-term reliability of loader.
- Independent detectors used for simultaneous elemental determination, resulting in rapid analysis times

Instrument Highlights and Features

Pure Oxygen Combustion System

- Dual-stage furnace system operates at temperatures up to 1050°C with pure oxygen to ensure the complete combustion of all organic samples, without requiring additional metal oxidizing reagents or other carrier gases without requiring additional metal oxidizing reagents or other carrier gases
- Quartz lance directs oxygen flow directly onto the sample, accelerating the combustion process and providing superior recovery
- Large, porous crucible aids combustion process and extends maintenance intervals

Improved Design and Accessibility for Maintenance Areas

- To enhance safety and convenience, reagent and reduction tubes are located on front side of the instrument behind a cabinet door, along with specially designed tools and storage to aid in performing maintenance tasks
- Open access to ballast and pinch valve assembly areas with quick-release features simplify preventive maintenance routines
- Replacement tubing kits available with sealed unions and fittings for fast, simple, and long-lasting replacement of ballast flow path area



Additional Features and Benefits

- Maintenance-free autoloader with optional capacity for up to 120 samples.
 analyzing capability up to 1 gram of sample size using sample holder of a Tin Foil Cup or Tin capsule.
 autoloader with standard capacity of 30 sample
- · Complies with AOAC, ASTM, ISO, AACC, and ASBC- approved methods of analysis
- Nitrogen and carbon/nitrogen configurations utilize a stainless-steel pre-chiller block and thermoelectric cooler to eliminate use of anhydrone for removal of moisture in the furnace combustion gases
- Micro Analytical balance for weighing the sample at atlist 1 μg riadadility.

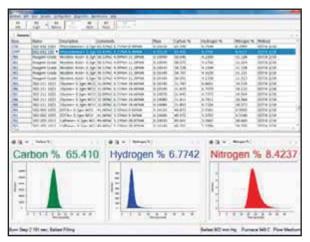
Options

- Sulfur add-on module provides independent sulfur determination on macro samples (350 mg)
- High-temperature combustion technique allows for sulfur analysis times of less than two minutes for liquid sample analysis up to 1 mL
- Nitrogen and carbon/nitrogen configurations avail

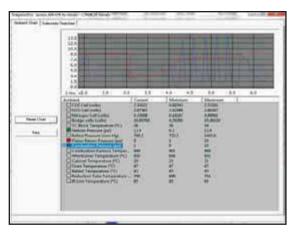
 operation

Easy-to-Use Operating Software

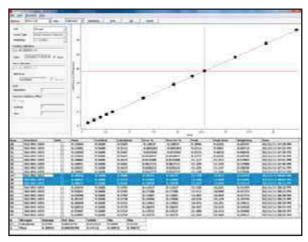
Simplified data handling, customizable data reporting/exporting, and a number of user-defined settings make the CHNS-3628 software flexible and easy to operate. With virtually unlimited storage space and compatibility with various Laboratory Information Management Systems (LIMS), this software is designed for seamless inter action with any operator or customer environment. A convenient on-board help manual allows quick access to information without leaving the instrument. The software also supports compliance to FDA regulations 21 CFR Part 11 for a closed analytical system.



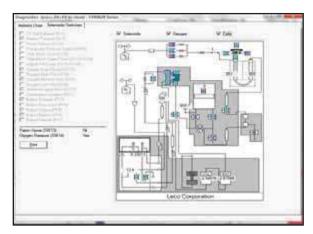
Seamlessly manage data and plots



Monitor real-time instrument component readings



Perform calibrations and drift corrections



Expanded interactive diagnostic screens to aid in troubleshooting and improve serviceability $% \left(1\right) =\left(1\right) \left(1\right) \left($



Your source for total analytical solutions



TGA-3701 Thermogravimetric Analysis

AC600 Isoperibol Calorimeter

- Fast and accurate calorific measurements
- Ergonomic optimized instrument automation
- Analysis time in as little as five minutes
- 6,000 to 15,000 BTU/lb. for 1 gram sample
- Determines moisture/ash or weight-loss in various organic samples
- Expanded temperature control (up to 1000°C) with variable atmospheres and ramp rates
- Pneumatic carousel mechanism and ergonomic design increases sample throughput, decreases downtime, and improves serviceability
- Complies with AOAC, AACC, and ASTM-approved methodology

Specification Sheet

Instrument Range*	Carbon: 0.02 to 175 mg Carbon Hydrogen: 0.1 to 12 mg Hydrogen Nitrogen: 0.04 to 100 mg Nitrogen Sulfur: 0.01 to 20 mg Sulfur
Precision Range	Carbon:0.01 mg or 0.5% RSD, whichever is greater Hydrogen:0.05 mg or 1.0% RSD, whichever is greater Nitrogen:0.02 mg or 0.5% RSD, whichever is greater Sulfur 0.005 mg or 1% RSD (whichever is greater)
Sample Mass	CHN Model:Up to 250 mg, 100 mg nominal CN Model:Up to 500 mg, 250 mg nominal N (FP) Model:Up to 750 mg, 500 mg nominal Sulfur: up to 350 mg, 250 mg nominal
Sulfur Analysis	60-120 seconds
Readability	0.0001%
Analysis Time	4.5 minutes
Detector	Sulfur:nfraRed (IR) Detector or TCD Detector Hydrogen:InfraRed (IR) Detector or TCD Detector Carbon:InfraRed (IR) Detector or TCD Detector Nitrogen:Thermal conductivity Detector(TCD)Detector
Detection Method	Carbon/Hydrogen:Non-Dispersive Infrared (IR) Absorption Nitrogen:Thermal Conductivity (TC Cell) Detector Carrier:Helium (99.99% pure) @ 35 psi (2.4 bar) ±10% Combustion:Oxygen (99.99% pure) @ 35 psi (2.4 bar) ±10%
Gases Required	Pneumatic:Compressed air (source must be oil and water free) @ 40 psi $(2.8 \text{ bar}) \pm 10\%$
Furnace	Resistance furnace; both primary and afterburner; up to 1100°C
Autoloader	30-position (stackable to 120 samples)
Environmental Conditions	Operating Temp: 15°C to 35°C (59°F to 95°F) Humidity: 20% to 80%, non-condensing
Dimensions**	32 in. H x 27.5 in. W x 30 in. D (81 x 70 x 76 cm)
Weight (approx.)	273 lb. (124 kg) Shipping Weight (approx.): 324 lb. (147 kg)
Electrical PowerRequirements	230 V~ ($\pm 10\%$; at max load), 50/60 Hz, single phase, 12 A; 4,000 BTU/hr



HPLC Servicing, Validation, Trainings and Preventive Maintenance:

HPLC Servicing: HPLC Servicing: We have team of service engineers who can attend to any make of HPLC promptly @the most

affordable cost.

Trainings :We also take up preventive Maintenace to reduce downtime of HPLC's Trainings.

AMC's/CMC :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-

shooting.

Validations :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

Instruments: We offer instruments/Renting Services Modules like pumps, detector etc. on Rent.





About Analytical Technologies

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufaturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

Our Products & Technologies



UV/VIS Spectro 2080+ Double Beam



Infra FTIR



Optima Gas Chromatograph 3007



Optima Gas Chromatograph 2979 Plus



Flash Chromatograph



Atomic Absorption Spectrophotometer



Liquid Partical Counter



Optical Emission Spectrophotometer



DSC/TGA



Semi Auto Bio Chemistry Analyzer



HEMA 2062 Hematology Analyzer



Micro Plate Reader/Washer



URINOVA 2800 Urine Analyzer



Total Organic Carbon 3800



Fully Automated CLIA



NOVA-2100 Chemistry Analyzer



PCR/Gradient PCR/ RTPCR



TOC Analyzer



Laser Particle Size Analyzer



Ion Chromatograph



Water purification system

Regulatory compliances



Corporate Social Responsibility

Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



- 1.Research & Innovation Scientist's awards/QC Professional Award: Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personallities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at Info@analyticalfoundation.org
- 2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.
- 3. ANALYTICAL FOUNDATION aims to DETOXIFY human minds, souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

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