

N Protein Analyzer

N Protein 3806



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

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net

N Protein 3806 is a Nitrogen, Protein Analyzer Model making use of the Dumas combustion method.

N Protein 3806 is a state-of-the-art instrument for the elemental analysis based on sample combustion and separation of gases.

The N₂ combustion product is quantified by a high resolution TCD detector.

CO₂ is trapped in the innovative Zeoquantum system while H₂O is condensed by specific Permapure trap.

Fully automatically operated: from the available samplers to the oxygen dosage, from the monitoring of consumables status to the zeolite regeneration system.

►► **N Protein 3806 Model is composed by:**

- ✓ Dual furnace combustion system (for a better combustion and optimization of catalysts)
- ✓ Water extraction system by Permapure and water trap
- ✓ Carbon dioxide adsorption system by Zeoquantum
- ✓ Detection system
- ✓ Data acquisition and handling.

N Protein 3806 can be configured for nitrogen as well as for the CN determination.

Very versatile, it is very useful for analysis of a wide range of sample types and sizes - both liquids and solids, from micrograms to grams of organic materials. Thanks to the absence of a GC column, sample weight limits are wider.

Pneumatic, electric and manual samplers and high quality consumables are available.

Automatisms make N Protein 3806 particularly user-friendly: the automatic oxygen dosage system allows a better consumption of oxygen and consumable status monitoring function optimizes the catalysts to be used.

By the Zeoquantum CO₂ adsorption system a large amount of carbon dioxide can be treated by an automatic regeneration system – resulting in more precision, greater performances in a shorter time. When used in a C-N configuration, the simultaneous determination of nitrogen and carbon is attained.

The exclusive designed TCD -Thermal Conductivity Detector -is self-calibrating so that no reference gas is needed.

The N Protein 3806 is particularly suitable for linking to other units for determination of the isotopic ratios of carbon stable isotopes

►► FEATURES AND BENEFITS

- Fully automated analysis system
- High sensitivity, accuracy and precision
- Application flexibility and versatility
- Zeoquantum CO₂ adsorption and desorption
- Simultaneous nitrogen and carbon determination
- Powerful software for results visualization from PC
- Touch-screen display for an easy settings management
- Consumables status monitoring for an optimization of catalysts usage
- Three types of samplers available : electronic, pneumatic, manual type
- Easy connection to Mass Spectrometers and other detectors for carbon stable isotopes analysis
- Low operation and management costs



►► Analytical And Technical Features

N Protein 3806 Features		
Type	N - Proteins	5 min
Analysis Time	N	2 min
	CN	8 Min
Analytical Range	N	80 mg
	C	100 mg
Accuracy*	<0,2% (certified standard; purity >99.9%)	
Precision*	<0,1% (certified standard; purity >99.9%)	
Sampler	Pneumatic	
	autosampler	147 positions
	Electronic	
	autosampler	32, 50 100 positions
	Manual sampler	
Dual Furnace System		
Safety Quick-Fit		
Integrated water trap		
Zeoquantum CO ₂ adsorption and desorption system		
Touch-screen display		
Stand-by mode		

Physical Specifications	
Dimensions	98x50x37cm
Weight	78kg
Power Supply	230V, 50/60Hz
Power Absorption	5A, 1100W.
Gas Requirements	Helium (99.999% purity), 3-5 bars
	Oxygen (99.999% purity), 3-5bars
	Air (oil free compressed air)`

Analytical Conditions	
Gas Carrier	Helium
Leak Test	Automatic leak test
Furnace Temperature	Left Furnace : max 1100°C
	Right Furnace : max 1100°C
Oxygen volume need	Automatically calculated by the oxygen doser
Flow Rate	Electronic flow rate control
Water trap	Efficient and easy maintenance
Detector	High Sensitivity TCD
Software Data analysis	EAS Clarity
Calibrations	Linear, Quadratic, Cubic
Active Calibration	As Needed

Sample	
Sample Size	0.1-400 mg (depending on sample nature)
	up to 1 g for soil samples
Sample Type	Liquid
	Solid
Capsule	High purity tin and silver capsules

Accessories	
Kit	
Balance	
Consumables	Proprietary Analytical Technologies Limited
Assistance by phone or email within 24 hours	

►► Servicing, Validation, Trainings and Preventive Maintenance :

- Servicing** : We have team of service engineers who can attend to any make of instrument promptly @the most affordable cost.
- Trainings** :We also take up preventive maintenance to reduce downtime of instrument's Trainings.
- AMC's/CMC** : We offer user training both in-House and at customer sites on instrument principles, operations, troubleshooting.
- 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 globe. 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

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Analytical Foundation

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 personalities 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 DETOXYFY human minds, souls and body by means of Yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

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