



# iS - 3000 Series Bench Top NMR





EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

**Analytical Technologies Limited** 

An ISO 9001 Certified Company

www.analyticalgroup.net



It Portable NMR can serve as a complete system console for Nuclear Magnetic Resonance (NMR) or Nuclear Quadrupole Resonance (NQR) with spectrometer frequencies from 0 to 100 MHz (certain restrictions apply, see the Manual).

This unique system is housed in a small form factor 2U rackmount/desktop or dual bay enclosure, providing users with a compelling price/size/performance proposition unmatched by any other device on the market today

### Key Specifications

- Integrates excitation and acquisition components onto a single system.
- Directly captures and digitally demodulates IF/RF signals. The desired baseband band width is user definable through software.
- Generates completely formed RF excitation pulses as well as high resolution digital control signals
- Has Arbitrary Waveform Generation (AWG or 'shaped pulse') capability
- · Maintains signal coherence between excitation and acquisition systems at all frequencies.
- Autonomously signal-averages the baseband data between multiple acquisitions.
- Samples the input signal at up to 75 Ms/s with 14-bit resolution.
- Captures input signals above the Nyquist frequency, up to approximately 100 MHz.
- Provides up to 10 MHz bandwidth of acquired baseband data.
- Direct Digital Synthesis generates RF output pulses with 14-bit resolution up to 300 Ms/s clock frequency.
- Pulse setting resolution up to 13.3 ns, with pulses from 66.6 ns to several days per interval.
- Zero-latency phase and frequency switching.
- Wide-bandwidth input amplifier and A/D converter allow for undersampling applications.

# **Applications**

Nuclear Magnetic Resonance (NMR), Magnetic Resonance Imaging (MRI), and Nuclear Quadrupole Resonance (NQR) experiments from 0 to 100 MHz. Example applications include:

Process control using Nuclear Magnetic Resonance (NMR).

Solid-state and solution-state NMR.

High-resolution solid-state NMR under MAS.

Field-Frequency Lock System for high-resolution high-field NMR console.

Detection of explosives using Quadrupole Resonances (NQR).

Magnetic resonance in porous media.

Well bore NMR

Multi-spectral sensing on autonomous vehicles.

Medical imaging, MRI.

Ultrasound.

Radar.

Optical Cohorence Tomography.

Quantum computing.

Optically detected NMR, OD-NMR.

Solid state physics experiments.

Nanomagnetism and spintronics applications.

General laboratory use.



### **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.

# Reach us @





HPLC Solutions MultipleLabs Analytical Bio-Med Analytical Distributors Analytical Foundation (Trust)