

# APCM - 3001

## Automatic Particle Counting Microscope



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

**Analytical Technologies Limited**

An ISO 9001 Certified Company

[www.analyticalgroup.net](http://www.analyticalgroup.net)

## ▶▶ Product Introduction



## ▶▶ Technical Specification

### 1 Software

Automatic Foreign/ Particulate matter count software

- Automatic Imaging on 25, 47, 90 mm filter paper
- Particles Size from 0.5 micron to 3000-micron Calculation and Distribution
- Selective Measurement/differentiation between reflective, non-reflective particles and fibres based on morphological characteristics.
- Identification of particulate matter from the solution
- On-the-fly calculation of particulate matter in captured area, total filter paper area.

- In-The-Run intelligent checks and expert guidelines
- Flexible and customizable reports
- 21 CFR part 11 compliance

Detail Analytical Report

- Physical Parameters of Individual Particulate matter
- Images of individual particulate matter
- Comparison of analysis of different samples
- D1-D100 values
- Report complying to standards

Report is printable from software any time

Calibration & Validation of the software

## 2 Software PClass

PClass\_ Particle Size/shape Analyser & Classifier Software

- Static and Dynamic Imaging, Multilayer (z-stack) processing.
- Particles Size Distribution and Classification.
- Particle range 0.5 micron to 3000 micron
- Selective Measurement based on type, size and shape
- Identification of API, Excipient, Globule etc. in

Gel/Paste/Oil/Creame/Solution/Oinment/Suspension/Dispersion/Slurry/Powder

- Identification and Isolation of Agglomeration
- D10, D50 & D90 values with & without agglomeration
- In-The-Run intelligent checks and expert guidelines
- Flexible and customizable reports, Printable through any printer
- Method Development for specific Application

Auto focussing of images

Particle in Particle (Oil in water/Water in Oil)Methods

Calibration & Validation report

## 3 Microscope

Upright Trinocular Research Microscope Trinocular High End transmitted & reflected light Source:

- Microscope frame for reflected & transmitted light
- Trinocular Eyepiece tube 30° inclined with built in camera chip with 10 MP.

- Colour Corrected optical system
- adjustable, upper stage drive stop facility.
- Eyepiece high eyepoint with diopter adjustment

on

- eyepieces & rubber eyecups.
- Built in halogen/LED illumination
- Rotatable mechanical stage for polarized effect
- X& Y direction with vernier scale, hard coated, right-hand control.
- Condenser with slider slot: Focusable & lockable
- Calibration slide with
- stage micrometer & 4 standard circles to calibration
- Objective lenses

are:

- Plan Semi Apochromat objective 5X/0.12, WD 22.5
- Plan Semi Apochromat objective 10X/0.25, WD 21
- Plan Semi Apochromat Objective 20X
- Plan Semi Apochromat Objective 50X
- Lamp housing- halogen bulb or an energy saving -LED illumination
- offering stable color temperature and illumination intensity. They are interchangeable.
- Abbe condenser 0.9/1.25 and Turret condenser
- Optional eyepiece pointer is inserted into the eyepiece, like a reticle, for marking specific object details in the eyepiece image. Retrofittable.
- Polarizing contrast- A polarizer and analyser for polarizing contrast in transmitted light
- 5V USB port at the back of the fixed-Köhler stand to connect a power.

Full range intensity variation

with conveniently placed knob

- Dust Cover

Automatic expose control

Automatic gain control

#### **4 X-Y-Z Motorized Stage**

oMotorized stage:

ProScan<sup>®</sup> stage for upright microscopes, with travel range of 114x75 mm, 2 mm pitch ball screw and 200 step motors

Minimum Step Size 0.04  $\mu$

Metric accuracy per mm of travel: 0.2, (Average performance- 0.06)

ProScan<sup>®</sup> III Controller to control Encoded XY stage and focus, with 2x RS232, USB and programmable TTL.

Focus drive, complete

Focus control unit

Joystick control unit

Holder for a single 47 mm diameter filter, H101A stage Adaptor for H101A stages to allow fitting with

## 5 Camera High Resolution

High Resolution digital camera

- C-Mount adapter
- 10 MP Chip
- Higher resolution
- Higher Frames speed to capture the live filter paper scanning

## 6 Calibration Scale

NABL Certified Micrometer Glass Scale for Calibration with

- Scale 1 DIV = 0.1 mm
- Scale 1 Div = 0.01 mm
- Circle of Dia 0.15 mm
- Circle of Dia 0.07 mm
- NABL Certificate validity one year

## 7 Holder - 47mm Filter Paper

Holder for a single 25 mm diameter filter, H101A stage

Holder for a single 47mm diameter filter, H101A stage

Holder for a single 90 mm diameter filter, H101A stage

## 8 Slide Holder

Holder for Glass Slide

## 9 Filtration (Sample Prep) Unit

Millipore or Equivalent Filtration (Sample-Prep) Unit

- Hydrosol, SS Filter Holder, 25mm, 47 mm & 90mm
- Vacuum Filter Flask, Glass, 1 Ltr
- Vacuum Trap Assembly
- Solvent Filter Dispenser Bottle, 25mm, 47mm, 90mm
- Vacuum Pressure Pump, Oil Free, Neoprene Diaphragm coated with Teflon, 220V
- SS Forceps, Smooth Tip
- Vacuum Hose, Silicone, 4.5" Long

## 10 Filter Paper

Filter paper for 25mm, 47mm and 90mm patches (0.8 microns 2000 Nos and 1.2 Microns- 2000 Nos).

## 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 Maintenance 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.

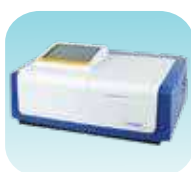
**Instruments** :Instruments :We offer instruments/Renting Services Modules like pumps,detector etc. on Rent.



## 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, Manufacturing, 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.

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3007



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Atomic Absorption  
Spectrophotometer



Liquid Particle  
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



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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:



# 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](mailto: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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**Corporate & Regd. Office:**  
Analytical House, # E67 & E68,  
Ravi Park, Vasna Road, Baroda,  
Gujarat 390 015. INDIA

T: +91 265 2253620  
+91 265 2252839  
+91 265 2252370  
F: +91 265 2254395

E: [info@hplctechnologies.com](mailto:info@hplctechnologies.com)  
[info@multiplelabs.com](mailto:info@multiplelabs.com)  
[info@analyticalgroup.net](mailto:info@analyticalgroup.net)  
[info@analyticalbiomed.com](mailto:info@analyticalbiomed.com)

W: [www.analycalgroup.net](http://www.analycalgroup.net)  
[www.hplctechnologies.com](http://www.hplctechnologies.com)  
[www.multiplelabs.com](http://www.multiplelabs.com)  
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