



About ATOS Instruments Marketing Services – ATOSCOPE Instruments Pvt. Ltd.

ATOS, over the years, has built a strong understanding of the instrumentation needs of the scientific and industrial R&D community in India. Our differentiating competency has been to regularly introduce innovative technologies in the market.

This and an in-depth understanding of scientific challenges has brought recognition to ATOS as being a collaborative partner of the scientific and industrial R&D communities.













- ▶ 163 mm to 750mm high resolution Spectrometers
- ▶ Echelle grating based Mechelle 5000 for LIBS
- Large format CCD & Scmos, EMCCD, ICCD, & InGaAs Detectors
- ▶ Highest sensitivity, -100°C TE Cooling, Low Dark Current
- ▶ High Energy X-Ray CCD, <2ns gating ICCD, 100fps sCMOS



- ▶ Cryostats for Optical/Electrical/Magnetic measurements
- ▶ Ultra Low Vibration optical Cryostats
- ▶ X-ray, UHV, ARPES, Astronomical Interface Cryostats



- ▶ FLIR Infrared Systems for Research & Science
- Cooled and Uncooled detectors for Lab, Field & Airborne applications
- ▶ Thermal sensitivity up to 20mk, Temperature measurement up to 3000°C, frame rates to 1000 fps



- ▶ Choice of Monochromators, Light Sources & Detectors
- ▶ Solar Cell Quantum Efficiency Measurement System
- ▶ Spectroradiometers, Goniophoto-Meters & Flurometer
- Measurement system for Photobiological safety,
 Fibre Spectral Loss & Thin FilmSunscreen samples



- ▶ Helium Recovery Systems
- ▶ Helium Liquefiers 20 L/Day 80 L/Day
- ▶ GM Cryocoolers
- ▶ Nitrogen Liquefiers 20 L/Day 1000 L/Day



- ▶ Completely portable Hyperspectral camera with built in scanner
- ▶ Detectors to cover VNIR/NIR/SWIR/LWIR wavelengths
- ▶ Detectors for Airborne/Field/Laboratory applications



- IR NDT, Lock-in, Pulse, Transient, Vibro-Thermography
- C-Check: Developed for aircraft industry
- ▶ Defect Characterization by Lock-in & Pulsed thermography
- ▶ Smart detectors for integration in industrial processes



- High Power Tunable Scientific Diode Lasers
- Littman/Metcalf and Littrow Lasers
- Tera Hertz Lasers & Quantum Cascade Laser
- External Cavity & Vertical Cavity Surface Emitting Laser



- Gas Mixing Solutions Software controlled with feedback
- ▶ 3 Channels MICRO Flows: 0 15L/min flow with Accuracy: 1.0%
- ▶ 6 Channels STANDARD Flows: 0 5L/min with Accuracy: 1.0%



- Hi Res spectroscopy, large optics and long focal lengths
- Ultra high vacuum spectrometers upto 6m focal length 10-10 Torr vacuum levels
- Grazing incidence spectrometer upto 1m focal length using MCP and CCD



High resolution Spectroscopy and Imaging Solutions



Cryostats for temperatures < 4.2 K with nanometre level vibrations



Complete Helium Liquefaction and Recovery Solutions



Hyperspectral Imaging Cameras for Field, Lab & Airborne



IR NDT System by Lock-in, Pulse, Transient, Vibro-Thermography C-Check for aircraft industry

What Makes ATOS a Great Choice?

As a Customer you will get the benefit of working with a team of instrumentation experts that has excelled itself in terms of ownership, competence, integrity and one that believes in working with you to address financial and technical challenges to ensure that you get the best product and service for your project.

As a Partner you get the benefit of a brand and a trained team that comes highly recommended by over a 100 institutional customers and close to 500 installations in India. You will have an opportunity to meet, interact and do business with some of the brightest minds in this business.













THERMAL IMAGING CAMERAS Cooled & Uncooled IR cameras



Diode Lasers – Littrow & Littman Tera Hertz, Quantum Cascade Lasers



Precision Gas Mixers



Solar Cell Characterisation System



Compact Pulsed Laser Femtosecond, Picosecond, Nanosecond Laser



Femtosecond, Picosecond & Nanosecond Pulsed laser

Custom lasers, weight <2 kg for space constraint modelling



Ultra Fast Low Noise Scientific Camera for SWIR Imaging

▶ InGaAs 640 x 512, 400 / 600 FPS, < 30 e - Readout noise, 93 dB and 16 bits Fast e-APD MCT IR sensor, 320 x 256, 3500 FPS, Sub-electron Read noise



Custom Designed CMOS Image Sensors - Global shutter

▶ Stitched devices, allowing large scale devices, up to wafer scale

Correlated double sampling, X-Ray, UV, NIR, IR & cryogenic operation



Terahertz imaging cameras & IR to Terahertz lenses

A hybrid control system IR/THz for NDT solutions

▶ On-site NDT of insulating opaque composite materials



▶ Solar Simulators & Vacuum Testing - BEYOND 'CLASS A'

Close spectral match for AMO and AM1.5 spectra (320 - 2200nm)

High Flux Beam Concentrator: 600/ 1200 suns @ 10mm x 10mm area



▶ Laser Scanner and LIDAR surveying - Dual return laser with 16 Channel, 300,000 Points/sec, 100m Range Survey grade IMU, Dual receiver/antenna GPS/GLONASS



▶ Multispectral Camera - Easily embedded on any UAV 6 global shutter sensors, 450 and 850nm range, GPS geotagging Sync recording up to 2 pictures/ second, Wi-Fi connection



► Microfluidic Sensors and Flow Control System
Fast & Stable, No pulsation with high & low flow rates

Microfluidic Pressure & Vacuum Pump with software



SWIR and High Dynamic Range Imaging Solutions

► Fast compact SWIR Infrared Cameras and Sensors

▶ Welding, Semiconductor Inspection & Surveillance Applications



Solar simulators and I-V measurement systems Irradiance Uniformity, Temporal study of Irradiance

▶ High Power Xenon & Halogen lamps, AAA class



AREAS OF SPECIALIZATION - APPLICATIONS

UV-VIS-NIR-SPECTROSCOPY



CCD, EMCCD, ICCD, SCMOS CAMERAS

SPECTROGRAPHS (UV-VIS-NIR)

HIGH RES & VACUUM MONOCHROMATOR

UV-VIS-NIR-THZIMAGING



CCD, EMCCD, ICCD, SCMOS CAMERAS

TERAHERTZ IMAGING CAMERAS

SW-IR LOW NOISE & FAST CAMERAS

X-RAY HIGH ENERGY IMAGING



CCD, EMCCD, ICCD, SCMOS CAMERAS

SPECTROGRAPHS (UV- VIS- NIR)

HIGH RES & VACUUM MONOCHROMATOR

THERMOGRAPHY SOLUTIONS



COOLED & UNCOOLED – IR CAMERAS

NON-CONTACT IR THERMOMETER

SW-IR IMAGING AND NIGHT VISION

NDT SOLUTIONS



NDT - THERMOGRAPHY BASED SYSTEMS

COOLED & UNCOOLED –
IR CAMERAS

TERAHERTZ IMAGING CAMERAS

LOW TEMPERATURE PHYSICS

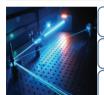


CUSTOMISED CRYOSTATS SOLUTIONS

HELIUM, NITROGEN LIQUEFIER

SPECTROGRAPHS (UV- VIS- NIR)

LASERS, DIODES, VAPOUR CELLS



DIODE LASERS (UV-VIS-IR-THz & QCL)

VAPOUR CELLS AND VCSEL DIODES

COMPACT PULSED & CUSTOM LASERS

HYPERSPECTRAL SOLUTIONS



HYPERSPECTRAL IMAGING CAMERAS

MULTISPECTRAL
IMAGING CAMERA

LASER SCANNER AND LIDAR SURVEYING

SOLAR CELL CHARACTERIZATION



IPCE, EQE, IQE & SPECTRORADIOMETERS

SOLAR SIMULATORS & I-V MEASUREMENTS

SOLAR SIMULATORS & VACUUM TESTING

ATOS - Differentiators



- Technology Leadership
- Instrumentation Expertise



- Viewed as a scientific partner for complex applications
- Enduring relationships in the R&D scientific community



- Excellent reputation & Brand recallHigh Integrity
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- Commitment to Service
- Repeat Customers

Customer Clusters



CSIR Labs

Defence Labs

R&D Industry

Atomic Labs

Space Labs

Educational Institutes



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