



SPECTROMETERS

REVOLUTIONARY  
INNOVATION IN  
OES SPECTROSCOPY

**GOLD PLUS XL**  
METAL ANALYZER



CUTTING EDGE  
INNOVATION IN  
OES SPECTROSCOPY

**GOLD PLUS X**  
METAL ANALYZER



AFFORDABLE  
INNOVATION IN  
OES SPECTROSCOPY

**éMission 2**  
METAL ANALYZER



RELIABLE  
INNOVATION IN  
OES SPECTROSCOPY

**SILVER PLUS**  
METAL ANALYZER



# About Us

**Vas Spectrometer is a pioneering team of spectrometer developers** in India. We are in the business of making **international quality products at affordable price**, our 24 years of experienced team, work every day in spectrometry to apply and share our know-how in ways that benefit industry metal analysis needs.

Fundamentally, our work is also about humanizing technology. We put the user experience at the heart of an innovation, building-in simplicity and making new technology more accessible. After all, products which are delightfully simple to use are more likely to be easily adopted and recommended to others.

## SERVICES

We are renowned in the industry to offer best in class **after sales services**. We provide **24/7** services across the globe. Our service support team can be connected in different support modules like

### How We Can Assist You

**Telephonically**

**Online support**

**On-site visit**

**Product Guides**

**FAQs**

**Tutorials**

We do have a team of engineers who are trained, dedicated and skilled. This combination of disciplines, underpins our engineers to give best services in the industry. Our service workmanship allows our customers to choose us to maximise their **productivity and investment**.

When it comes to encapsulating our capability on delivery VAS Spectrometers has installed **1300 +** spectrometers in Indian and overseas market. Following are few of our valuable customers who are using our spectrometer and satisfied with the performance.

# REVOLUTIONARY INNOVATION IN OES SPECTROSCOPY

## **GOLD PLUS XL** METAL ANALYZER



- ✓ 56+ elements including N2\*
- ✓ Analysis Down to 10PPM
- ✓ Quick Startup Technology
- ✓ Upto 8 CCDs Detector Array
- ✓ True 100KHz real-time regulated spark system
- ✓ V-MAP Digital CCS Multi Frequency Spark Source
- ✓ Unique highly advanced 5 axis machined Monoblock optics

## Technical Specifications

### Excitation Source

- V-MAP digital current controlled source with true 100KHz real-time regulation system
- Fully software controlled excitation source
- Multi-frequency spark source, up-to 1KHz
- High energy micro-melt for better precision(internally software controlled)
- High precision spark condensed spark source
- Analytical program parameter selected automatically by software
- Maintenance free

### Software & Analysis

- Extremely user friendly operation
- Factory calibrated
- Automatic inter element interface corrections
- Display of Mean SD or RSD
- User flexibility to standardize each analytical program
- User configurable type standardization
- Logging of the analysis data
- Quick retrieval of results from historical data
- User friendly report generation
- Option to transfer data to Excel spreadsheet

### Optical System

- Rowland circle arrangement
- Resolution: > 3pm
- Wavelength range 136 -720nm
- Temperature stabilized and sealed against dust and contamination
- High-performance Custom designed holographic diffraction grating
- High resolution CCD detector array with 3694pixels each
- Profiling- automatic & real time, software controlled

### Spark Source

- Argon flashed with automatic adjusted low flow in standby and analytical modes
- Multi Directional Optimised Flow design
- Tungsten electrode
- Mechanical quick-engage sample clamp - Flexible for large and small sample size
- Easily removable sample base for chamber cleaning and maintenance

### Control & Data Processing

- Gigabit Ethernet connectivity
- Windows® based software
- Complete and accurate control of instrument through a high performance 32bit adv soc based data acquisition system
- Externally connected computer arrangement

### Weight & Dimensions

- Instrument Weight 80kg approx. (without utility base)
- Instrument size 1000 x 700 x 380MM (W x D x H)

### Environmental Requirements

- Operating temperature 20 to 25°C
- Storage temperature -10 to 50°C

### Electrical Requirements

- 230V AC, 50Hz (maximum 320VAC continuous)

# CUTTING EDGE INNOVATION IN OES SPECTROSCOPY

## GOLD PLUS X METAL ANALYZER



- ✓ Upto 28+ Elements
- ✓ Analysis Down to 50PPM
- ✓ Revolutionary 100KHz Regulation System
- ✓ Monoblock Volume-optimized super stable optical system
- ✓ Most user friendly Spectrometer software ever

## Technical Specifications

### Excitation Source

- V-MAP current controlled source with true 100KHz real-time regulation system
- Fully software controlled excitation source
- Multi-frequency spark source, up-to 1KHz
- High energy micro-melt for better precision (internally software controlled)
- High precision spark condensed spark source
- Analytical program parameter selected automatically by software
- Maintenance free

### Software & Analysis

- Extremely user friendly operation
- Factory calibrated
- Automatic inter element interface corrections
- Single sample standardization for specific grade analysis-Grade Standardization
- Check Sample library for Primary/Secondary Standard
- User defined alloy for various range (check range) for non-technical operators
- Single click comparison for check sample and check range
- User friendly report generation
- Option to transfer data to Excel spreadsheet

### Optical System

- Special designed and precise monoblock volume-optimizes super stable optical system with Argon Saving System
- Temperature stabilized and sealed against dust and contamination
- High performance holographic diffraction grating
- Wavelength range 163 - 417nm
- Profiling-automatic & real time, software controlled

- High resolution CCD detector array with more than 3600 pixels (1 pixel corresponds to 1 element channel)

### Spark Source

- Specially designed C shaped sample plate to prevent warping and deformation over long period of usage
- Argon flashed with automatic adjusted low flow in standby and analytical modes
- Tungsten electrode
- Mechanical quick-engage sample clamp - Flexible for large and small sample size
- Easily removable sample base for chamber cleaning and maintenance

### Control & Data Processing

- Ethernet USB connectivity
- Windows® based software
- Complete and accurate control of instrument through a high performance 32bit Atmel ATxMega based data acquisition system
- Work with standard desktop personal computer (connected externally)

### Weight & Dimensions

- Instrument Weight 42kg approx. (without utility base)
- Instrument size 750 x 535 x 270mm (W x D x H)

### Environmental Requirements

- Operation temperature 20 to 25°C
- Storage temperature - 10 to 50° C

### Electrical Requirements

- 230V AC, 50Hz (maximum 320VAC continuous)



# RELIABLE INNOVATION IN OES SPECTROSCOPY

## **SILVER PLUS** METAL ANALYZER



- ✓ Upto 22+ Elements
- ✓ Analysis Down to 80PPM
- ✓ Quick Startup Technology
- ✓ Lowest Operational Cost
- ✓ Specially designed for production and QA/QC applications

## Technical Specifications

### Excitation Source

- V-MAP current controlled source with true 100KHz real-time regulation system
- Fully software controlled excitation source
- High precision spark condensed spark source
- Analytical program parameter selected automatically by software
- Maintenance free

### Software & Analysis

- Extremely user friendly operation
- Factory calibrated
- Automatic inter element interface corrections
- Display of Mean SD or RSD
- User flexibility to standardize each analytical program
- User configurable type standardization
- Logging of the analysis data
- User friendly report generation
- Option to transfer data to Excel spreadsheet

### Optical System

- Monoblock volume-optimized super stable optical system
- Temperature stabilized and sealed against dust and contamination
- High performance holographic diffraction grating
- Wavelength range 163-417nm
- Profiling-automatic & real time, software controlled
- High resolution CCD detector array with 3600 pixels

### Spark Source

- Specially designed C shaped sample plate to prevent warping and deformation over long period of usage
- Argon flashed with automatic adjusted low flow in standby and analytical modes
- Tungsten electrode
- Mechanical quick-engage sample clamp - Flexible for large and small sample size
- Easily removable sample base for chamber cleaning and maintenance

### Control & Data Processing

- Ethernet USB connectivity
- Windows® based software
- Complete and accurate control of instrument through a high performance 32bit Atmel ATxMega based data acquisition system
- Work with standard desktop personal computer (connected externally)

### Weight & Dimensions

- Instrument Weight 42kg approx. (without utility base)
- Instrument size 750 x 535 x 270mm (W x D x H)

### Environmental Requirements

- Operation temperature 20 to 25°C
- Storage temperature - 10 to 50°C

### Electrical Requirements

- 230V AC, 50Hz (maximum 320VAC continuous)

# AFFORDABLE INNOVATION IN OES SPECTROSCOPY

## éMission 2

METAL ANALYZER

- ✓ Upto 15+ \ 21+ Elements
- ✓ Analysis Down to 100PPM
- ✓ Specially Designed & Developed for SMEs
- ✓ Minimalistic Design Philosophy
- ✓ Low Cost with Efficient Performance



éMission | Al

éMission | Fe

éMission | Cu

éMission | Zn

## Technical Specifications

### Excitation Source

- Fully software controlled excitation source
- Maintenance free

### Software & Analysis

- Factory calibrated

### Optical System

- Specially Designed Optics

### Spark Stand

- Specially designed C shaped sample plate to prevent wrapping and deformation over long periods of usage
- Tungsten electrode
- Automatic sample clamp-Flexible for large and small sample size

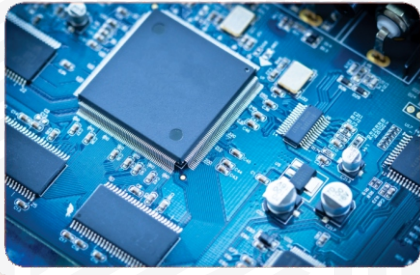
### Environmental Requirement

- Operating temperature 20 to 25°C

### Electrical Requirement

- 230V AC, 50Hz (maximum 320VAC continuous)

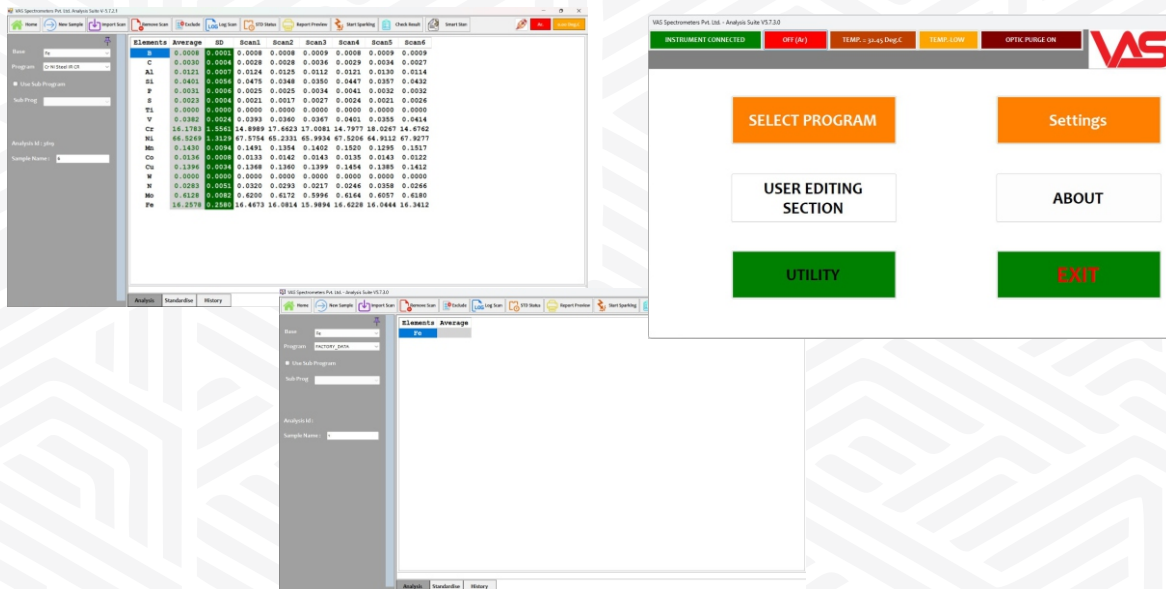
## Superior Spark Source



V-MAP Digital current controlled source with true real time 100KHz linear regulated. power source.

- The VAS OES Spectrometer is equipped with a unique and revolutionary spark plasma source.
- The spark circuitry is powered by V-MAP digital current controlled source design which besides employing a cutting edge active, true real time linear regulated power, also provides the flexibility of source parameter optimizations for different elements.
- This enables the spark source to operate over a wide input voltage range without compromising on reliability and stability.
- The spark source has a built-in high voltage protection as an added feature.
- Moreover the high power circuitry is carefully over-designed providing extra headroom for operations. This helps in preventing failure due to un-anticipated power fluctuations commonly found in India.

## Super-Intuitive Software Design



## 6th GENERATION ANALYSIS-SUITE SOFTWARE

- The Platinum Series analysis software called 'Analysis Suite 6' is arguably the most user-friendly software ever designed for an optical emission spectrometer.
- Now in its 6<sup>th</sup> generation, the software is the result of our expansive knowledge of user interface and user experience.
- The analysis software interface is 'control panel-like' which enables a layman to operate the machine with minimal training. Very little computer literacy is required to operate the instrument.

# OUR GLOBAL REACH

Global Presence  
across

**19+**  
countries

Gained

**1300+**

Satisfied Customers  
world-wide

## INDIA (HEADQUARTER)

- BANGLADESH
- CAMEROON
- CHINA
- GUNIEA
- SRI LANKA
- BOTSWANA
- CANADA
- COLOMBIA
- IRAN
- EGYPT
- KENYA
- MOROCCO
- NIGERIA
- SAUDI ARABIA
- LEBANON
- NEPAL
- OMAN
- SOUTH AFRICA



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