



# **G SERIES XRF**

High Precision Coating Measurement System



# **Who Benefits**

The G Series XRF is ideal for labs and production lines particularly where users have:

- Limited benchtop space
- > Budget limitations
- > A preference for "bottom-up" operation with a motorized Z axis
- > The need to position smaller samples quickly and easily

# **Key Features**

The two most distinctive features of the G Series are precision video imaging, and "bottom-up" measurement using a motorized Z-axis with laser-based auto-focus. The latter is a feature unique to Bowman. An available manual XY stage with 1.5 X 1.5" travel facilitates easy positioning of small and large parts.

# Configuration

The standard configuration includes a single fixed collimator and a fixed focus camera. An SDD detector is included, along with our long-life micro-focus x-ray tube. As with all Bowman benchtop XRFs, instruments can be upgraded to include multiple collimators or a variable focal camera.



# **BOWMAN G SERIES XRF**

Superior technically. Supported locally.

# **Specifications**

## X-ray Excitation

50 W (50kV and 1mA) micro-focused W anode tube

#### Detector

Silicon solid state detector with 190eV resolution or better

## **Focal Depth**

Single fixed focal depth with laser and auto focus

## **Video Magnification**

30x Micro: Standard 55x Micro: Optional 7x Digital Zoom: Standard

## **Working Environment:**

50°F (10°C) to 104°F (40°C) and up to 98% RH, non-condensing

#### Weight

25kg

# **Optional Manual XY Sample Stage**

Table Size: 11x10" Travel: 1.5x1.5"

### **Element Range**

Aluminum 13 to Uranium 92

# **Analysis layers and elements**

5 layers (4 layers + base) and 10 elements in each layer. Composition analysis of up to 25 elements simultaneously

#### Filters/Collimators

4 primary filters / single collimator (optional dual)

## **Digital Pulse Processing**

4096 CH digital multi-channel analyser with flexible shaping time. Automatic signal processing including dead time correction and escape peak correction

#### **Processor:**

Intel, CORE i5 3470 (3.2GHz), 8GB DDR3 Memory, Microsoft Windows 10 Prof, 64bit equivalent

#### Camera optics:

1/4" CMOS-1280×720 VGA resolution

## **Power Supply:**

150W, 100~240 volts; frequency range 47Hz to 63Hz

#### **Dimensions (HxWxD):**

Internal: 100mm (4"), 325mm (13"), 300mm (12") External: 325mm (13"), 350mm (14"), 450mm (18")

# **The Bowman Partner Network**

Bowman's Partner Service Network was established to facilitate large multi-national projects in the PCB industry. Today, it has become the model for XRF technical service worldwide, serving board shops, electronics manufacturers, automotive and aerospace OEMs, jewelry manufacturers, the fastener industry, and contract metal finishers in all sectors.

The Bowman Partner Network enables XRF technical service experts worldwide to provide same-day response to every service, repair and upgrade requirement.



Bowman global partners are certified annually, and maintain the highest standards of excellence and best practices.





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