



# Vanta™ Handheld XRF Analyzer

## Rugged. Revolutionary. Productive.

Vanta™ handheld XRF analyzers are rugged and built for analytically demanding applications in the harshest environments. Vanta analyzers are IP rated for protection against dust and water, drop tested, and built to withstand extreme ambient temperatures.

Vanta analyzers provide fast, accurate elemental analysis. Each device is powered by our proprietary Axon Technology™, a revolution in XRF signal processing that provides accurate, repeatable results for greater productivity and a fast return on investment. Vanta analyzers feature an intuitive interface so new users can begin testing with minimal training. Data is easily exported wirelessly or via USB.

## The Vanta™ Series

No matter the model, each Vanta handheld XRF analyzer is engineered for durability and analytical excellence. Evident manufactures Vanta analyzers to suit a variety of application and budget needs.

### **Vanta Max**

Our fastest, most capable Vanta analyzers feature exceptional performance for the most demanding applications, including mining exploration, mineral analysis, soil testing, and environmental analysis.

### **Vanta Core**

Vanta Core analyzers combine value with speed, low limits of detection (LODs), and a wide elemental range, making it the standard choice for fast alloy identification.

### **Vanta Element™**

Our entry-level analyzers offer affordable alloy identification, with the option to detect light elements on the Element-S model.

# Vanta Specifications

|                                       |  |
|---------------------------------------|--|
| <b>Dimensions (W × H × D)</b>         | Max and Core: 10.4 × 29.6 × 24.1 cm (4.1 × 11.6 × 9.5 in.)<br>Element: 8.3 × 28.9 × 24.2 cm (3.25 × 11.4 × 9.5 in.)  |
| <b>Weight</b>                         | Max: 1.9 kg (4.17 lb) with battery, 1.67 kg (3.67 lb) without battery<br>Core: 1.85 kg (4.06 lb) with battery, 1.62 kg (3.56 lb) without battery<br>Element: 1.54 kg (3.39 lb) with battery, 1.32 kg (2.91 lb) without battery                       |
| <b>Excitation Source</b>              | 4-watt X-ray tube with application-optimized anode material: rhodium (Rh) or silver (Ag)<br>Max (Rh), Core, and Element-S (Ag): 8–50 kV, Core (Rh): 8–40 kV, Element (W): 35 kV (2 watts)  |
| <b>Primary Beam Filtration</b>        | Max, Core, and Element-S: 8-position autoselected filter per beam per mode; optional collimation to 3 mm diameter beam spot, Element: Fixed aluminum filter and no internal collimation  |
| <b>Detector</b>                       | Max: Large-area silicon drift detector<br>Core and Element-S: Silicon drift detector<br>Element: Silicon PIN detector  |
| <b>Power</b>                          | Removable 14.4 V Li-ion battery (with hot-swap capability on Max only) or 18 V power transformer<br>100–240 VAC, 50–60 Hz, 70 W max  |
| <b>Display</b>                        | 800 × 480 (WVGA) LCD with capacitive touch screen supporting gesture control   |
| <b>Operating Environment</b>          | Temperature range for Max and Core: -10 °C to 50 °C (14 °F to 122 °F), and continuous full duty cycle with optional fan<br>Temperature range for Element: -10 °C to 45 °C (14 °F to 113 °F)<br>Humidity: 10% to 90% relative humidity non-condensing |
| <b>Drop Test</b>                      | Military Standard 810-G 4-foot (1.3 M) drop test   |
| <b>IP Rating and Detector Shutter</b> | Max, Core, and Element: IP54 dust protected and protected against water splashing from all directions<br>Max and Core: Solid detector shutter to help prevent detector damage  |
| <b>Pressure Correction</b>            | Max and Core: Built-in barometer for automatic altitude and air density correction   |
| <b>GPS</b>                            | Max: Embedded GPS / GLONASS receiver   |
| <b>Operating System</b>               | Linux cloud enabled with user fleet manager capability   |
| <b>Data Storage</b>                   | microSD™ slot with removable 1 GB industrial SD card included  |
| <b>USB</b>                            | (2) USB 2.0 type A host ports for accessories such as wireless LAN, Bluetooth®, and USB flash drives<br>(1) USB 2.0 type mini-B port for connection to computer  |
| <b>Wireless LAN</b>                   | Supports 802.11 b/g/n (2.4 GHz) cable optional USB adapter   |
| <b>Bluetooth</b>                      | Supports Bluetooth® with an optional USB adapter   |
| <b>Aiming Camera</b>                  | Full VGA CMOS camera (optional)  |
| <b>Panoramic Camera</b>               | 13-megapixel CMOS camera with autofocus lens (optional)  |
| <b>Warranty</b>                       | Max and Core: Three-year warranty<br>Element: One-year warranty  |
| <b>Selected Optional Accessories</b>  | Max and Core: Field Stand, Soil Foot, Holster, Work Station, Weld Mask, Hot Heel, and Probe Shield<br>Element: Field Stand, Soil Foot, and Holster   |



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