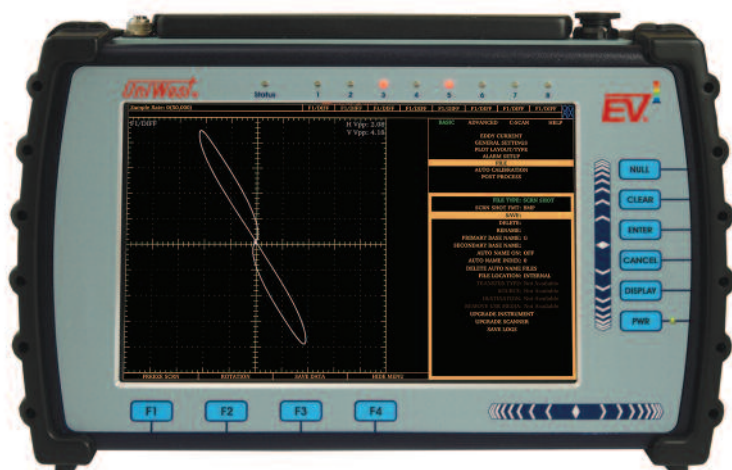


EVⁱ Imaging Eddy Current Test Instrument

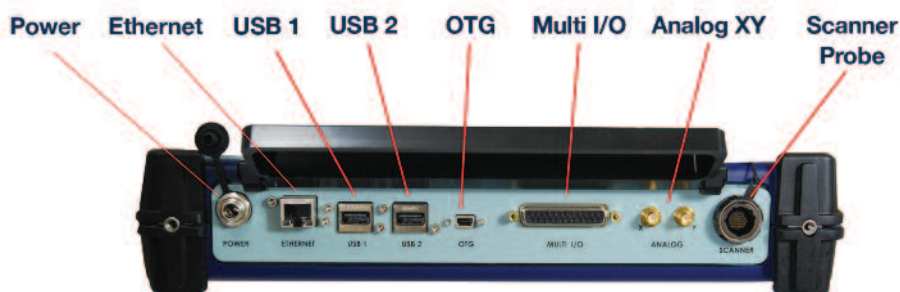


The **EVⁱ Imaging Eddy Current Test Instrument** is a state-of-the-art eddy current test instrument that performs nondestructive detection of cracks and indications in conductive materials. The EVⁱ Imaging Instrument is capable of storing instrument setups, reports, screen shots, and data files for later recall.

The EVⁱ Imaging Eddy Current Test Instrument provides numerous inputs and outputs, such as, multiple encoder connections, Ethernet connection etc.

A variety of features for this instrument includes:

- Multi/single frequency and channel view modes
- C-Scans, Impedance Planes, Oscilloscopes, Strip Charts, and many combinations of plots available
- Microprocessor control and versatility
- Easy to use menu driven control
- USB Flash Drive
- Optional External Keyboard



GENERAL

Dimensions

- (WxHxD): 13.8" x 8.75" x 2.58"
- Weight: 7 lb 0 oz without batteries, 9 lb 2 oz with 2 batteries

Display Size and Resolution

- 10.1" WXGA 1280x800 pixels

Operating temperature

- 0 – 45°C minimum when the battery is charging. 50°C when operating with a battery or AC but not both.

MEASUREMENTS

- Frequency Range: 120 Hz to 15 MHz
- Gain: 0 dB to 114 dB in 0.1 dB steps
- Rotation: 0 degrees to 359.9 degrees in 0.1 degree steps
- Sweep: 0.001 second to 10 second per division
- Low Pass Filter: 0 to 10 kHz adjustable to 3 digits of precision
- High Pass Filter: 0 to 10 kHz adjustable to 3 digits of precision
- Probe Drive: 2 Vp-p, 4 Vp-p, 7 Vp-p (Also variable from 0 to 7 Vp-p in 1 percent steps)
- Probe Coupling: Monitors the probe to part coupling of a differential probe.

EVⁱ Imaging Eddy Current Test Instrument

INPUTS/OUTPUTS

- Power connector: 2.5mm IP68 Locking Connector
- Scanner/Probe Connector: 27 Pin IP68 Connector
- Probe types: Absolute and differential in either bridge or reflection configuration
- X and Y Analog Outputs: 2 SMA connectors for differential, absolute, or combination
- DB25 connector: 8 configurable encoder, sync or other inputs, 8 configurable alarm, multiplexer, or other outputs, 2 dedicated alarm outputs – TTL and open collector
- Alarm outputs: TTL & Open Collector (multi I/O), Audio or Headphone (USB to 3.5mm adaptor)
- Video output: USB will support external monitors (VGA, DisplayPort, or HDMI with adaptors)
- Ethernet: Remotely control the instrument and retrieve data in real time.
- USB port A: Interface to storage devices, keyboard
- USB OTG: Interface to OTG storage devices
- Exportable Files: Report files, data files, settings files

POWER

- Power adaptor requirements: 100-240VAC, 1.4A max
- Power connector: 10VDC-24VDC
- Available batteries: 1 or 2 Lithium DR202i or compatible
- Battery operating time: 5 hours minimum with most scanners, 4 hour recharge rate.
- Battery protection: SMBus V1.1 safety features. Monitor battery thermistors, disconnects, and circuit protection. Batteries are hot swappable.
- Battery Charging: Instrument will charge batteries using external power

BUTTONS/USER INPUT

- Keyboard: A standard USB keyboard can be connected.

Front Panel Mechanical Buttons

1. NULL – nulls instrument
2. CLEAR – clears data buffer and error messages
3. CANCEL – cancels current operation in menus or closes secondary menus
4. DISPLAY – changes where on screen various items are found depending on mode and turns instrument off and on
5. ENTER – used to accept changes
6. POWER – Turn instrument ON/OFF
7. VERTICAL SLIDER – used to change values in menu, navigate screen
8. HORIZONTAL SLIDER – navigate screen
9. FUNCTION – 4 user programmable keys labeled F1 through F4

SMART SCANNER SUPPORT (SURFACE AND BOLT HOLE)

- Scanner Recognition: Scanner is recognized once connected and key operating parameters such as motor voltage and encoder resolution are setup in the instrument.
- Surface Scanner Imaging: Colors depict shape, size, and depth of discontinuities
- Bolt Hole Scanner Imaging: Aluminum, Titanium, and Steel layers are identified by color (Green, Brown, Blue)
- Interfaces are identified by color (Yellow)
- Lift-off conditions are identified by color (Purple)
- Flaws are identified by color (Red)
- Data Storage: Up to 300 data files can be saved on the instrument and reviewed later for verification of defects or used for reports