For the calibration and analysis of x-ray generator systems

Dynalyzer IV – Now with greatly enhanced computer connectivity!

Dynalyzer IV High Voltage Unit

Accu-Dyn+ Display System

MEASURE -
- kVp (anode, cathode, and anode + cathode)
- mA and mAs Anode current
- Filament current
- Exposure time

Used for: X-ray machine manufacturing, troubleshooting, annual calibration, installation, acceptance testing

DYNAVLYZER IV HIGH VOLTAGE UNIT –
The Dynalyzer IV is one of the most accurate tools for the calibration and analysis of x-ray generator systems.

The Dynalyzer IV, which is inserted in the high-voltage cables between the x-ray generator and the x-ray tube, provides ground-referenced analog and digital signals that are proportional to kV, anode current (mA) and filament current. The analog version of these signals can be routed to external test equipment such as an oscilloscope or digital voltmeter. The digital version of the anode-to-cathode voltage and the anode current can be connected to the Dynalyzer Accu-Dyn+ Display System and its associated Accu-Gold Excel software. Unlike non-invasive instruments, the Dynalyzer provides the user with direct kV measurements unaffected by tube target material or filtration.

DYNAVLYZER ACCU-DYN+ DISPLAY SYSTEM -
The Accu-Dyn+ display system provides the means to display, analyze and report values measured by the Dynalyzer that support calibration, compliance testing and troubleshooting. Displayed values include: kV, kVp, PPV, anode current, number of pulses, and pulse duration. In addition, waveforms of kV and anode current can be displayed and analyzed, providing a deeper understanding of the operation of the system.

THE GOLD STANDARD IN RADIATION MEASUREMENT

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**DYNALYZER IV HIGH VOLTAGE UNIT**

**TECHNICAL DATA: DYNALYZER IV HIGH VOLTAGE UNIT**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>kV accuracy</td>
<td>± 1%</td>
</tr>
<tr>
<td>Anode Current</td>
<td>± 1%</td>
</tr>
<tr>
<td>Filament Current</td>
<td>± 5%</td>
</tr>
</tbody>
</table>

All specifications subject to change.

**TECHNICAL DATA: ACCU-DYN+ DISPLAY SYSTEM**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>kV Accuracy*</td>
<td>± 1%</td>
</tr>
<tr>
<td>Anode Current</td>
<td>± 0.2%</td>
</tr>
<tr>
<td>Exposure Time</td>
<td>± 0.5 msec</td>
</tr>
</tbody>
</table>

*Waveforms and calculated kV values reflect a bandwidth of 4.5 kHz.

**KEY FEATURES**

- Automatic Triggering
  - Generator parameters are measured in real-time with “Auto Trigger” mode

- Create Custom Reports
  - Accu-Gold Excel allows users to create automated reports tailored to their needs

- Print Reports
  - The Windows Display can print to any Windows supported printer

- Advanced Calculations
  - PPV, kVp and average kV are automatically calculated

- Report Archive
  - Reports are stored in Excel format and can be recalled as needed

**OPTIONS & ACCESSORIES**

- Dynalyzer IV High Voltage Unit comes standard for 3 conductor applications. Includes two 12 foot coaxial cables and dummy plugs. (4 conductor applications Dynalyzer available on special request)
- Heavy duty shipping container (M-96115) for Dynalyzer IV (order separately)
- High voltage cable (M-53605), two 5-foot CA-1 cables recommended.

**DYNALYZER IV REAR VIEW WITH DIGITIZER**

- Connect to tube cathode.
- Connect to transformer cathode.
- Connect to transformer anode.
- Connect to tube anode.

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DYNALYZER WITH ACCU-DYN+DISPLAY SYSTEM KEY FEATURES AND BENEFITS:

- Automatic Triggering: Generator parameters are measured in real-time with “Auto Trigger” mode.
- Create Custom Reports: Accu-Gold Excel allows users to create automated reports tailored to their needs.
- Print Reports: The Windows Display can print to any Windows supported printer.
- Advanced Calculations: PPV, kVp and average kV are automatically calculated.
- Report Archive: Reports are stored in Excel format and can be recalled as needed.

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**TECHNICAL DATA: DYNALYZER IV HIGH VOLTAGE UNIT**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>± 1% accuracy</td>
<td>10 kV to 150 kV</td>
</tr>
<tr>
<td>± 1% Anode Current</td>
<td>1 mA to 1 A, DC to 4 kHz</td>
</tr>
<tr>
<td>± 5% Filament Current</td>
<td>DC to 20 kHz</td>
</tr>
</tbody>
</table>

All specifications subject to change.

**TECHNICAL DATA: ACCU-DYN+ DISPLAY SYSTEM**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>± 1% kV Accuracy</td>
<td>10 - 150 kV, DC to 4.5 kHz</td>
</tr>
<tr>
<td>± 0.2% Anode Current</td>
<td>0.1 mA to 1 A, DC to 2.3 kHz</td>
</tr>
<tr>
<td>± 0.5 msec Exposure Time</td>
<td></td>
</tr>
</tbody>
</table>

*Waveforms and calculated kV values reflect a bandwidth of 4.5 kHz.*

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- DYNALYZER IV HIGH VOLTAGE UNIT
  - Connect to tube cathode.
  - Connect to transformer cathode.
  - Connect to transformer anode.
  - Connect to tube anode.

- This BNC connector, marked KV-A, supplies a sample of the anode voltage.
- This BNC connector, marked KV-A+C, supplies a sample of the anode-to-cathode voltage.
- This BNC connector, marked KV-C supplies a sample of the cathode voltage.
- The BNC connector supplies an analog voltage corresponding to the filament current. [Scale factor = 0.1 volt (p-p) per ampere (p-p).]
- This BNC connector provides an analog voltage proportional to the anode current. The scale factor is either 1 mV/mA or 20 mV/mA depending on the Rad/Fluoro switch.

- HIGH VOLTAGE TERMINALS
  - X-ray cable receptacles (3-conductor) conform to Federal Standard.

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- DYNALYZER IV REAR VIEW WITH DIGITIZER
  - Accu-Dyn+ Digitizer
  - USB connection to display
  - kV output to Digitizer
  - mA output to Digitizer

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