EDITOR HFe Series
HIGH FREQUENCY X-RAY GENERATORS

X-Ray Generators for Radiography and Fluoroscopy

technical specifications

spellmanhv.com
With over 70 years of high voltage innovation, world-class ISO certified production facilities and global support network, Spellman can meet the needs of OEM system manufacturers by providing custom engineered solutions that enable equipment manufacturers to improve their systems’ performance, reliability, cost and bottom line.

As the world’s leading independent manufacturer of X-Ray generators and Monoblock® X-Ray sources, Spellman High Voltage is proud to offer the HFe Series of standard and custom high frequency diagnostic X-Ray generators for medical imaging. These versatile, high performance, high frequency X-Ray generators are feature packed and offer world-class performance specifications with power levels from 40kW to 80kW. Compatible with most digital interfaces and X-Ray room system mechanics, the HFe Series is the intelligent choice for the medical OEM.

Typical Applications
- Remote R&F
- Classical R&F
- Urology
- Molecular Imaging
- Image Guided Radiation Therapy

Standard Radiographic & Fluoroscopic Options
- Interface for Automatic Exposure Control
- Interface for dose measuring devices and workstations offering integrated readouts
- Continuous Fluoroscopy
- Pulsed Fluoroscopy
- Automatic Brightness Stabilization
- Powering 1 tube and 2 tube configurations
- Integrated 3 Phase starter
- Windows based Software simplifies integration of the EDITOR HFe generator to any workstation
Custom Engineering
- Spellman has vast design and production experience in high duty cycle applications and has demonstrated this competence in modern CT, Proton Therapy, Functional/Molecular Imaging and image guided radiation therapy
- Over three decades of IGBT inverter design experience
- Hfe X-Ray generator without grid control is capable of sub 5 mS exposure helps our customers achieve superlative tomographic images

Grid Control Technology
- CANBUS communication within the HFe allows for market leading responsiveness and stability
- Grid control technology allows for sharper rise & fall times = better image quality
- Gridded X-Ray tubes allow highly accurate and reproducible pulses down to 1mS reducing patient movement caused image degradation and optimizing the dose required for imaging

Single Source Efficiency/Subsystem Solutions
- Subsystem components are received into one of Spellman’s Medical ISO 13485 facilities
- All components undergo quality control and verification inspection by Spellman engineers
- Components are tested individually then integrated and calibrated as part of a system
- Shipped as one complete subsystem to customer for installation
- 24 hr global technical support

Launch Platform
A wide diversity of medical applications are served using Spellman power supplies. Spellman has many base platform products to begin customization with

Understanding your application and your customers
Engineering teams with deep system and application-level knowledge can make recommendations to your engineering teams to enhance your X-Ray system

Global engineering resources
R&D engineering across three continents, with multiple competencies (hardware, electrical, software/firmware) at each site are overseen by a project engineer dedicated to the success of your product

Production and Process Control
- Vertically integrated manufacturing enable fast/flexible reactions to customer needs
- Products can be manufactured at multiple Spellman sites
- Standardized processes, training and equipment
- Global ERP system

Simplify Your OEM Supply Chain with Pretested, Calibrated, Subsystem Solutions from One Global Resource.
## EDITOR HFe Series

**HIGH FREQUENCY X-RAY GENERATORS**

### Radiography and Fluoroscopy

**SPECIFICATIONS for Standard Models**

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<thead>
<tr>
<th>MODEL</th>
<th>EDITOR HFe 401</th>
<th>EDITOR HFe 501</th>
<th>EDITOR HFe 601</th>
<th>EDITOR HFe 801</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Power</td>
<td>40kW</td>
<td>50kW</td>
<td>65kW</td>
<td>80kW</td>
</tr>
<tr>
<td>mA/kW @ 0, 1s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>@ 40kV</td>
<td>400 / 16</td>
<td>400 / 16</td>
<td>400 / 16</td>
<td>400 / 16</td>
</tr>
<tr>
<td>@ 60kV</td>
<td>500 / 30</td>
<td>650 / 39</td>
<td>800 / 48</td>
<td>800 / 48</td>
</tr>
<tr>
<td>@ 80kV</td>
<td>500 / 40</td>
<td>625 / 50</td>
<td>800 / 64</td>
<td>800 / 64</td>
</tr>
<tr>
<td>@ 100kV</td>
<td>400 / 40</td>
<td>500 / 50</td>
<td>650 / 65</td>
<td>650 / 65</td>
</tr>
<tr>
<td>@ 125kV</td>
<td>320 / 40</td>
<td>400 / 50</td>
<td>520 / 65</td>
<td>640 / 80</td>
</tr>
<tr>
<td>@ 150kV</td>
<td>266 / 40</td>
<td>330 / 50</td>
<td>430 / 65</td>
<td>530 / 80</td>
</tr>
</tbody>
</table>

Continuous falling load (with AEC) | Yes |

**kV range for exposure** | 40-150kV |

**Increments of or in (steps)** | 1kV |

**27 steps** |

**mA range for exposure in** | 10-500 mA |

| 18 steps | 10-650 mA | 19 steps | 10-800 mA | 20 steps | 10-800 mA |

**mA accuracy** | ±(6% + 1mA) |

| ±(10% + 1mA for ms≤10ms) |

**Max. mA @ max kV** | 500mA @ 80kV |

| 650mA @ 76kV | 800mA @ 81kV | 800mA @ 100kV |

**ms range for exposure in** | 1-6300 ms |

| 38 steps |

**mA range (optional) in** | 0.5-1000 mAs |

| 34 steps |

**mA accuracy** | ±(10% +0.2mAs) |

**Fluoroscopy Option** | Yes |

**kV range for fluoroscopy** | 40-125kV |

**Increments of** | 1kV |

**mA range for fluoroscopy** | 0.5-5.0mA |

**High current fluoroscopy** | 1-20mA |

**Pulsed fluoroscopy** | 10-150mA |

**Max. mA @ max kV** | 8.2mA @ 125kV |

**Continuous** |

**Pulsed** |

| 150mA @ 125kV |

**Automatic Exposure Control (AEC) interface** | Optional |

**AEC mAs range** | 0.5-600 mAs |

**Interface for Air Kerma/ Dose Area Product** | Optional |

**Printer and PC interface** | RS-232 |

**High Speed Starter HSS1/HSS2** | Optional |

**Generator operating control console** | Optional |

**Digital integration w/o console** | Ethernet and RS-232 |

**Dimensions** | 21.65 [55cm] W x 19.29 [49cm] D x 38.18 [97cm] H |

**Weight** | 266lbs. [121kg] |

Please consult factory regarding product configuration availability and regulatory requirements for specific markets.