



KIMTRON™

Sub Systems

Kimtron™ Polaris® family of Sub Systems consist of a Kimtron™ Polaris® X-Ray Generator(s), PLC based Controller & I/O, Tube Cooler, HV Cable and an X-Ray Tube. The system is supplied as an integrated, tested and optimized package to insure trouble free installation and rapid production startup.

Our Sub systems can be programmed to drive any commercially available X-Ray tube, without the need for EPROM changes or tedious calibration. A perfect low cost solution for applications requiring very high, stable levels of flux and superior penetration.

Superior, Innovative
X-Ray Products and Services



Kimtron™ Polaris® High Voltage Power Supplies

Kimtron™ Polaris® X-ray Power Supplies represent state of the art patented technology, built to the highest engineering specifications and quality standards. Our units are configured in both unipolar and bipolar models and are designed to drive fixed anode, constant potential x-ray tubes provided by leading x-ray tube manufacturers.

Kimtron™ Polaris® High Voltage Power Supply Features include:

- X-ray Tube Arc Impervious: Withstands up to 10 arcs per second at full load.
- Active Filament Management: No filament current overshoot beyond tube limit or emission overshoot during rapid ramp-up.
- Filament friendly design: Extends tube life.
- Solid State Filament Relay Circuitry: Eliminates mechanical contact failure.
- Ability to perform x-ray tube “re-conditioning”: Clean-up gassy tubes in the field.
- Active Power Factor Correction (PFC) >98% @ full load.
- Fastest Rise time available: From zero to full power in 500ms.
- Superior stability with lowest kV ripple on the market.
- Ultra-sensitive stable mA: Regulation down to 100 microamps.
- Standard open source machine-to-machine interface
- Complete stability throughout the entire kV range
- Drive any Industrial tube on the market: No EPROM change necessary.
- Lowest power consumption on the market: More efficient than competitive units.
- Generators “plug & play” into many competitive system environments: Can operate with many existing controllers.



Kimtron™ Polaris® SC-500, Series-3 X-Ray Controller Features include:

- Open architecture – Machine to machine interface.
- Includes I/O Box - easily interfaces with lead room /cabinet environment.
- Robust, industrial-grade graphical user interface
- Software upgrades performed via flash memory – no need to send unit back to OEM
- Remote communications – system can be diagnosed remotely (optional)
- Cell Productivity Management- SC-500 can Network Multiple cells and provide Radiography Exposure Tracking and Cell Productivity Reports. Custom reports readily available. (optional)
- On-board auxiliary tube-temperature sensor (optional)
- Flags and faults presented in easily understood text format – no numbers to decipher
- Able to address infinite number of x-ray tube-types
- Event log maintains history of fault codes
- Ability to store up to 7500 techniques
- Ability to address up to three separate x-ray tube parameters simultaneously
- Auto Watt=Auto warm-up
- “Tube-safe®” feature shuts down system when preset number of tube arcs are sensed



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Kimtron™ Polaris® X-Ray Cooler Features include:

- Disposable air intake filters keeps radiators clean in harsh environments
- Fluid flow safety interlock
- Fluid temperature safety interlock
- Fluid pressure indicator
- Real-time fluid temperature display
- Single panel service-access
- Easy service-access to all components
- Designed specifically for high duty cycle metal-ceramic x-ray tubes



ISO-9001 Certified



Made In America



ISO 9001