

# HiTek H P Power

*The Power Supply  
Pioneer*



## X-RAY PRODUCT RANGE

**H**iTek Power is acknowledged as a global leader in the design and manufacture of Low and High Voltage Power Supplies providing complete solutions for a wide range of standard and OEM applications.

With over 30 years' experience, HiTek Power has a total commitment to customer satisfaction, achieved through our technical expertise, manufacturing excellence, product reliability and friendly staff. HiTek has manufacturing and sales operations in the US, the UK, Germany and Japan, as well as affiliates in China and Taiwan. HiTek currently employs 130 people, including a large staff of qualified design engineers and technology specialists committed to developing innovative high quality power solutions.

HiTek Power's primary expertise is in the semiconductor, instrumentation, communication, computer networking, medical and scientific market sectors; as well as the specialised industrial

segments of precision engineering and commercial/industrial printing. Our specialised sales and engineering teams ensure we can address an ever-increasing spectrum of customer applications with purpose-built products.

Quality is fundamental to the way we operate our business – cost-effective products, prompt service, technical advice and efficient after-sales support are all key to our success.

***If you need a power supply, for whatever purpose, please contact our sales team.***

***You will be glad you did!***

## QUALITY & ENVIRONMENT

***HiTek Power's quality management system has been continuously registered to ISO9001 since 1995 and the company achieved third-party ISO14001 registration for its UK environmental management systems in February 2007.***

***HiTek Power is now able to ship product compliant with the RoHS Directive if required. This follows a period of detailed working with both its customer and supplier bases as well as reconfiguration of HiTek's internal processes. In addition, the company has an X-MET3000 XRF scanner, as part of its due diligence RoHS process.***

**H**iTek Power has many years experience in providing power for the generation of X-rays through the design of high voltage power supplies for industrial and scientific equipment.

HiTek Power X-ray power supplies, designed to meet many inspection and analytical applications, range in power capability from the top of the range 2kW Series XR2000 down to the low power 50W Model XRF50 module.

These X-ray power supplies are used in industrial X-ray checking and inspection systems, X-ray diffraction (XRD) and X-ray fluorescence (XRF) analysis, as well as in food inspection system applications.

This brochure is just an overview of our X-ray power supply range. Detailed specifications are available on request from our sales department or via our website.

*Can't find anything to suit your requirements?*

Please contact our sales team to discuss a custom-built power supply.



## 150W X-RAY POWER SUPPLY MODULE Series XR150



### Features:

- 150W output power
- Extensive tube protection facilities
- Robust IGBT converter design
- Short circuit & overload protection
- High stability
- Low ripple
- High accuracy filament control
- Analogue or RS232 interface option

The XR150 is a modular 150W x-ray power supply for use in inspection and analytical X-ray systems.

Model	Output Voltage (max)	Output Current (max)	Output Power (max)
XR150-603-02	60kV	2.5mA	150W

## 72W X-RAY POWER SUPPLY MODULE Series XR70



### Features:

- 72W output power
- Compact size
- Extensive tube protection facilities
- High Efficiency FET Power Conversion
- Short circuit & overload protection
- High stability output voltage and beam control
- Low ripple
- High accuracy filament control
- Analogue or RS232 interface option

The XR70 is a compact, modular X-ray generator power supply for grounded-cathode tubes. Measuring only 204x73x127mm this unit is one of the smallest in the market for its power capabilities.

Model	Output Voltage (max)	Output Current (max)	Output Power (max)	Control Option
XRG70/603P*	60kV	1.2mA	70W	Positive
XRG70/603N*	60kV	1.2mA	70A	Negative

\*If filament required: Add F suffix

\*If RS232 interface option required: Add C suffix

\*If extended output tube required: Add X suffix



## 50W X-RAY POWER SUPPLY MODULE Model XRF50



### Features:

- 50W output power
- RS232 remote control
- Floating DC filament
- Floating grid/bias
- Beam control
- Flashover & short circuit protection
- LED status indication

The XRF50 is a modular X-ray power supply for gridded tubes in industrial and scientific analytical applications. Powered from 24V DC input, the unit has full RS232 digital remote control.

Model	Output Voltage (max)	Output Current (max)	Output Power (max)
XRF50-503-01	50kV	1mA	50W

## 60W VERSATILE HIGH VOLTAGE POWER SUPPLY MODULES Series MH60



### Features:

- 60W output power
- 24V DC powered
- Local or remote control
- Full V & I control
- High accuracy V & I monitor
- Low ripple
- Protected against flashover and continuous short circuits
- High reliability
- Screened high voltage output cable
- Positive or negative polarity
- Filament option

The Series MH60 is a range of versatile high voltage modules suitable for specification in OEM equipment. Powered from 24V DC, the MH60 supplies up to 60W output and allows full range control and monitoring of output voltage and current. Custom versions can be produced for specific requirements.

Model	Output Voltage (max)	Output Current (max)	Output Power (max)
MH60/503	50kV	1.2mA	60W
MH60/403	40kV	1.5mA	60W
MH60/303	30kV	2mA	60W

## 80W & 100W VERSATILE HIGH VOLTAGE POWER SUPPLY MODULES Series MHX



### Features:

- 24V DC powered
- High reliability
- Local or remote control
- Full V & I control
- V & I monitor
- Low ripple
- Protected against flashover & continuous short circuits

The Series MHX is a range of versatile, high voltage modules designed for specification in OEM equipment as a component power supply. Powered from 24V DC, these units allow full control and monitoring of voltage and current via 0-10V analogue signals. In addition, internal potentiometers are provided for voltage and current control.

Model	Output Voltage (max)	Output Current (max)	Output Power (max)
MHX-603	60kV	1.67mA	100W
MHX-803	80kV	1mA	80W

## 100W VERSATILE HIGH VOLTAGE POWER SUPPLY MODULES Series MH100



### Features:

- 100W output power
- 24V DC powered
- High reliability
- Local or remote control
- Full V & I control
- V & I monitor
- Low ripple
- Protected against flashover & continuous short circuits
- Screened high voltage output cable

The Series MH100 is a range of versatile, high voltage modules suitable for specification in OEM equipment as a component power supply. Powered from 24V DC, these units allow full range control and monitoring of voltage and current via 0-10V analogue signals. In addition, internal potentiometers are provided for voltage and current control.

Model	Output Voltage (max)	Output Current (max)	Output Power (max)
MH100/502	5kV	20mA	100W
MH100/103	10kV	10mA	100W
MH100/253	25kV	4mA	100W
MH100/303	30kV	3.33mA	100W
MH100/403	40kV	2.5mA	100W
MH100/503	50kV	2mA	100W

## 1kW X-RAY POWER SUPPLIES

### Series XR1000



#### Features:

- 1kW output power
- Extensive tube protection facilities
- Robust IGBT converter design
- Short circuit & overload protection
- High stability
- Low ripple
- High accuracy filament control
- Analogue or RS232 interface option

The Series XR1000 is intended as a component power supply for use in industrial and analytical X-ray systems and low energy industrial radiography applications. The XR1000 features HiTek Power's proven IGBT converter design. Tube arc suppression and interlocks are standard.

Model	Output Voltage (max)	Output Current (max)	Output Power (max)
XR1000/603	60kV	16mA	1000W
XR1000/903	90kV	11mA	1000W

## 2kW X-RAY POWER SUPPLIES

### Series XR2000



#### Features:

- 2kW output power
- Extensive tube protection facilities
- Robust IGBT converter design
- Short circuit & overload protection
- High stability
- Low ripple
- High accuracy filament control
- Analogue or RS232 interface option
- Constant power output

The Series XR2000 is intended as a component power supply for use in industrial and analytical X-ray systems and low energy industrial radiography applications. The XR2000 features HiTek Power's proven IGBT converter design. Tube arc suppression and interlocks are standard.

Model	Output Voltage (max)	Output Current (max)	Output Power (max)
XR2000/603	60kV	44mA	2000W
XR2000/903	90kV	32mA	2000W

# HiTek



# Power

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