

SPELLMAN INTEGRATED X-RAY SYSTEMS FOR LOW POWER NDT

# Sub Systems O.3KW-1.2KW X-RAY SOURCE SOLUTIONS

System Matched TURN-KEY X-Ray Sources





LOW POWER NDT APPLICATIONS

FOOD INSPECTION

PHARMACEUTICAL PACKAGING

**AUTOMOTIVE** 

**AEROSPACE** 

**MANUFACTURING** 

**DEFENSE** 

**MEDICAL X-RAY** 

**INDUSTRIAL X-RAY** 

**ANALYTICAL X-RAY** 

FILL LEVEL CONFIRMATION

MEDICAL STERILIZATION

ELECTRONICS INSPECTION

CRYSTAL INSPECTION

MINERAL ANALYSIS

X-RAY FLUORESCENCE

Call or visit our website to inquire about an X-Ray NDT solution with the worlds' leading DXM generators.

spellmanhv.com e-mail: sales@spellmanhv.com

## Sub Systems O.3KW-1.2KW X-RAY SOURCE SOLUTIONS

## System matched, integrated, tested, and warrantied... all from One Source

Spellman's DXM Series Sub Systems are specifically designed for low power NDT imaging applications such as food process inspection, pharmaceutical manufacture and packaging and electronic component inspection to name a few.

The DXM X-Ray Sub Systems and DXM high voltage power supplies set the standard for compact 0.3kW to 1.2kW high performance X-Ray inspection requirements. With an output voltage of 160kV, one of our DXM160 turn-key sub systems shown here.



Tube, generator, HV cable(s), cooler... fully integrated and tested at Spellman High Voltage

Assembly ready; "Plug And Play" out of the box

Cables, hoses, fittings all part of the packaged system

One purchase order

One phone call to Spellman for support

2 year warranty for system exceeds that of individual outsourced components/assemblies.

X-Ray tube warranty is prorated.

# Let us configure a custom DXM Sub System for your application







#### DXM X-Ray Generators

- From 20kV-160kV, 300W, 600W and 1200W
- Universal Input, power factor corrected
- Hot anode or hot cathode X-Ray tube capable
- USB, Ethernet and RS-232
- CE Compliant, UL Recognized and RoHS Compliant
- User programmable arc detect feature

#### Metal Ceramic X-Ray Tubes



- Full range of metal ceramic tubes from industry leading manufacturers
- Water cooled unipolar designs offered in 75kV, 100kV and 160kV configurations
- Available in a variety of power levels, focal spots and target angles

#### Industrial X-Ray Tube Coolers



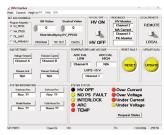
- All chillers and coolers are designed and validated to work with standard metal ceramic X-Ray tubes
- Closed loop X-Ray tube chillers for water when ambient temperature rises to 40°C
- Water/water or oil/water options are available

#### HV X-Ray Cables



- Available in custom lengths from Industry leading manufacturers
- Straight and right angle connections available

#### Optional GUI Control Software



The GUI is specifically designed for controlling DXM Series power supplies. As an alternative to the analog control, the GUI will allow the user to control all necessary functions of the HVPS from a user-friendly windows based menu. Additionally the GUI can be used as a diagnostic tool when the HVPS is controlled via the analog interface.







### Performance.

#### LOW RIPPLE... HIGH STABILITY

Industry best stability and output ripple specification provide consistent output (kV & mA) for longer scans, reduced banding and improves data quality.

#### **FAST RAMP UP TIME SPECIFICATIONS**

Ramp time is user adjustable through the proprietary DXM GUI control.

#### **FILAMENT CONFIGURATION**

Closed loop emission control regulates filament setting to provide desired X-Ray tube emission current. Either a floating filament or ground referenced filament available.

## Reliablility.

#### **DESIGN VALIDATION**

Industry leading reliability and MTBF. Environmental stress screening, electrical overstress, extended arcing and HALT compliance. Testing conducted on X-Ray tube loads and beta testing in multiple applications.

#### **ENCAPSULATION**

The DXM's oil free design eliminates leaks and environmental concerns. The encapsulated dielectric high voltage section made of our proprietary large-pour formulation provides significantly higher dielectric strength than oil, is more forgiving of field stresses, and eliminates the maintenance and biohazards associated with oil tanks.

## Flexibility.

#### **COMPACT & LIGHTWEIGHT**

The DXM Series small footprint and light weight offer additional flexibility and logistical options.

#### PLUG-N-PLAY COMPATIBILITY & EASE OF USE

DSP based SMT control circuitry provides your choice of USB, Ethernet and RS-232 along with analog interfaces simplifying OEM system integration.

#### **SERVICEABILITY**

The DXM Series has a unique modular design, with four Field-Replaceable Units (FRUs) that minimize MTTR, service inventory and overall repair cycle time. Global technical support ensures swift response to any service requests

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