

APPLIED KILOVOLTS

GRID

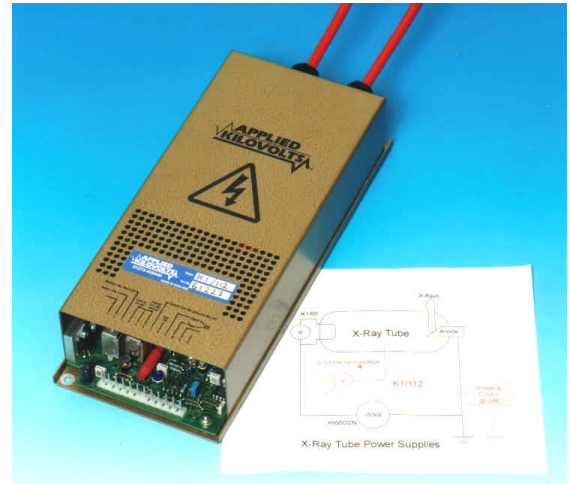
FEB04

KF001PAA112 ISOLATED GRID MODULE OUTPUT 1.2 kV ISOLATED TO 50kV

Applications

Micro-Focus Grounded Anode X-Ray Tubes:
Focus Electrode driver
Extraction Electrode driver including beam
current control.

Power input & control at ground potential



This power supply uses the proven precision oscillator from the standard 10 watt HP series and is intended to provide X-ray tube grid control up to 1.2kV. The grid can be isolated from ground by up to 50 kV, while power input & control remain at ground potential. Higher isolation voltages, and different o/p voltages are also possible; please consult the factory for more details. Options include beam current stabilisation and control when used to drive an extraction grid.

Electrical Specification

Input voltage:	24V d.c. $\pm 1V$ at 0.75A maximum.
Output Voltage:	120V to +1200V dc. at 3mA. Isolated to 50 kV.
Control:	0 to +10V gives 0 to +1200V.
Ripple:	Less than 2% peak to peak, ripple frequency 50 kHz.
Injected Ripple	Less than 3% peak to peak. (Measured with 100pf load capacitance.)
Line regulation:	Less than 0.1% for 1V change in 24V.
Load regulation:	Less than 10% of full scale for 10% to 100% change in load current.
Temperature co-efficient:	0.1% per °C.
Voltage monitor (pin 3):	0 to 10V represents 0 to 1200V (accuracy $\pm 15\%$.)
Operating temperature:	0 °C to +45 °C.

Mechanical Specification

Size:	280 x 120 x 60 mm
Output cables:	2 off TV50 screened length 1 metre approx.
Pin connections:	See K001PAA112 Application Notes