



# ANALOG MODULES, INC.

ISOLATED SWITCH-MODE POWER MODULE

## ISOLATED SWITCH-MODE POWER MODULE

- COMPACT 6.0" x 5.5" x 2.85" PACKAGE
- 2000W NON-POWER FACTOR CORRECTED
- 1750W POWER FACTOR CORRECTED
- CEMARKED AND APPROVED TO UL 60601-1 MEDICAL SAFETY STANDARD
- DIRECTIVE 2011/65/EU (RoHS II) COMPLIANT
- **LOW EMI, ULTRA LOW LEAKAGE CURRENT**
- HIGH EFFICIENCY
- MODULAR, EXPANDABLE



#### **DESCRIPTION:**

The *Model 5704A* isolated switch-mode power module uses a proprietary power conversion technique to charge energy storage capacitors to a specified voltage and to maintain this output level for switched, variable pulsewidth solid-state laser applications. The *Model 5704A* provides the highest power density of any power module on the market and may easily be used with additional *5704A* Series modules for high average power applications. The *Model 5704A* is designed to meet the isolation and leakage current requirements for the most stringent medical applications. For OEM applications, ask about the AMI *Model 5724*.

#### SPECIFICATIONS:

Input

Voltage (See table on reverse side.)

24VDC at 250mA (typical) also required

Power Factor

Corrected: 0.9 with rectified 230VAC input,

253VAC max., 1750W output

(add -P to part number)

Uncorrected: 0.65 with 325VDC input, 360VDC max.,

2000W output

(add -N to part number)

HV Control 0 to 10VDC proportional control with

 $20k\Omega$  input impedance

Inhibit 3.5 to 24VDC to inhibit with  $10k\Omega$  input

impedance

**Cooling Requirements** 

≥110CFM recommended. Pull air from

connector end.

**Operating Temperatures** 

0° to +40°C

Output

Power (See table on reverse side.)

Operation at voltages <90% of maximum voltage will result in decreased average power. (See power derating curve on

reverse.)

Voltage

(Maximum) 400 to 1000VDC (specify in part number)

Regulation 0.1% (typical) Efficiency 85 to 90% (typical)

Charged Indication

15VDC output requires pulldown resistor

**Leakage Current** 

25μA (typical)

**Protection** Open Circuit, Short Circuit, Thermal

Overload, Over-Voltage

**Size** 6.0" x 5.5" x 2.85" (without fan)

Weight 3 lbs





Specifications subject to change without notice.

# **APPLICATIONS:**

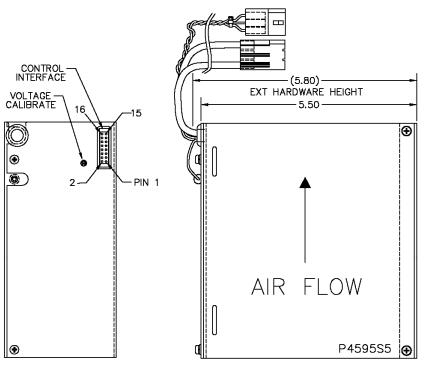
Constant Voltage Output for Solid-State Lasers

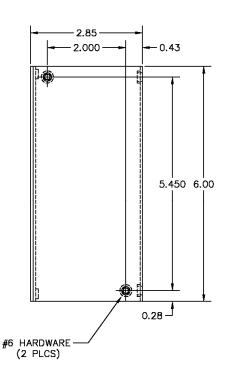
		MODEL 5704A - XXXX		
		MINIMUM OUTPUT POWER		
		325VDC (-N-D)	230VAC (Rectified) (-P-D)	115VAC (Rectified) (-P-C)
Output Voltage (Maximum)	400V to 1000V	2000W	1750W	1100W

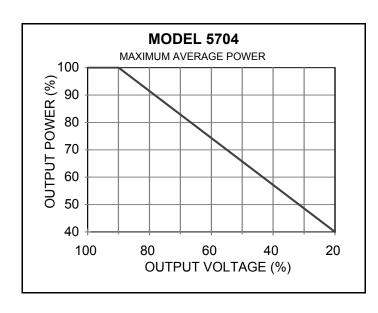
Typical Part Number: 5704A-1000-P-D =

Input Voltage: 230VAC (rectified)
Output Voltage: 1000VDC

Maximum Output Voltage: 1000VDC
Minimum Output Power: 1750W
Module is power factor corrected







## 5703/04 IO INTERFACE DESCRIPTION

FUNCTION			
TEMPERATURE TEST POINT			
DEMAND OUTPUT RETURN			
DEMAND OUTPUT CONTROL			
SIGNAL RETURN			
24V RTN			
24V RTN			
PRIMARY INHIBIT			
PIN 8 IS REMOVED N/C			
24V INPUT			
24V INPUT			
+5V REFERENCE			
N/C RESERVED			
OVERTEMP OUT			
N/C RESERVED			
END OF CHARGE			
SECONDARY INHIBIT			