



### ISOLATED SWITCH-MODE POWER MODULE

- COMPACT 6.0" x 5.5" x 2.85" PACKAGE
- 2000 W NON-POWER FACTOR CORRECTED
- 1750 W POWER FACTOR CORRECTED
- UL 60601-1 COMPLIANT
- 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.)  
24 VDC at 250 mA (typical) also required

#### Power Factor

Corrected: 0.9 with rectified 230 VAC input,  
253 VAC max., 1750 W output  
(add -P to part number)  
Uncorrected: 0.65 with 325 VDC input, 360 VDC max.,  
2000 W output  
(add -N to part number)

HV Control 0 to 10 VDC proportional control with  
20 k $\Omega$  input impedance

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

#### Cooling Requirements

$\geq$ 110 CFM 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 1000 VDC (specify in part number)

Regulation 0.1% (typical)

Efficiency 85 to 90% (typical)

Charged Indication

15 VDC output requires pulldown resistor

#### Leakage Current

25  $\mu$ A (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:

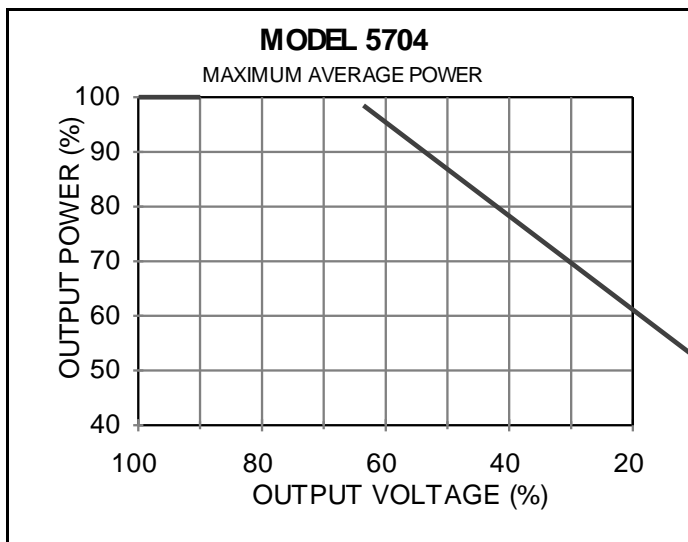
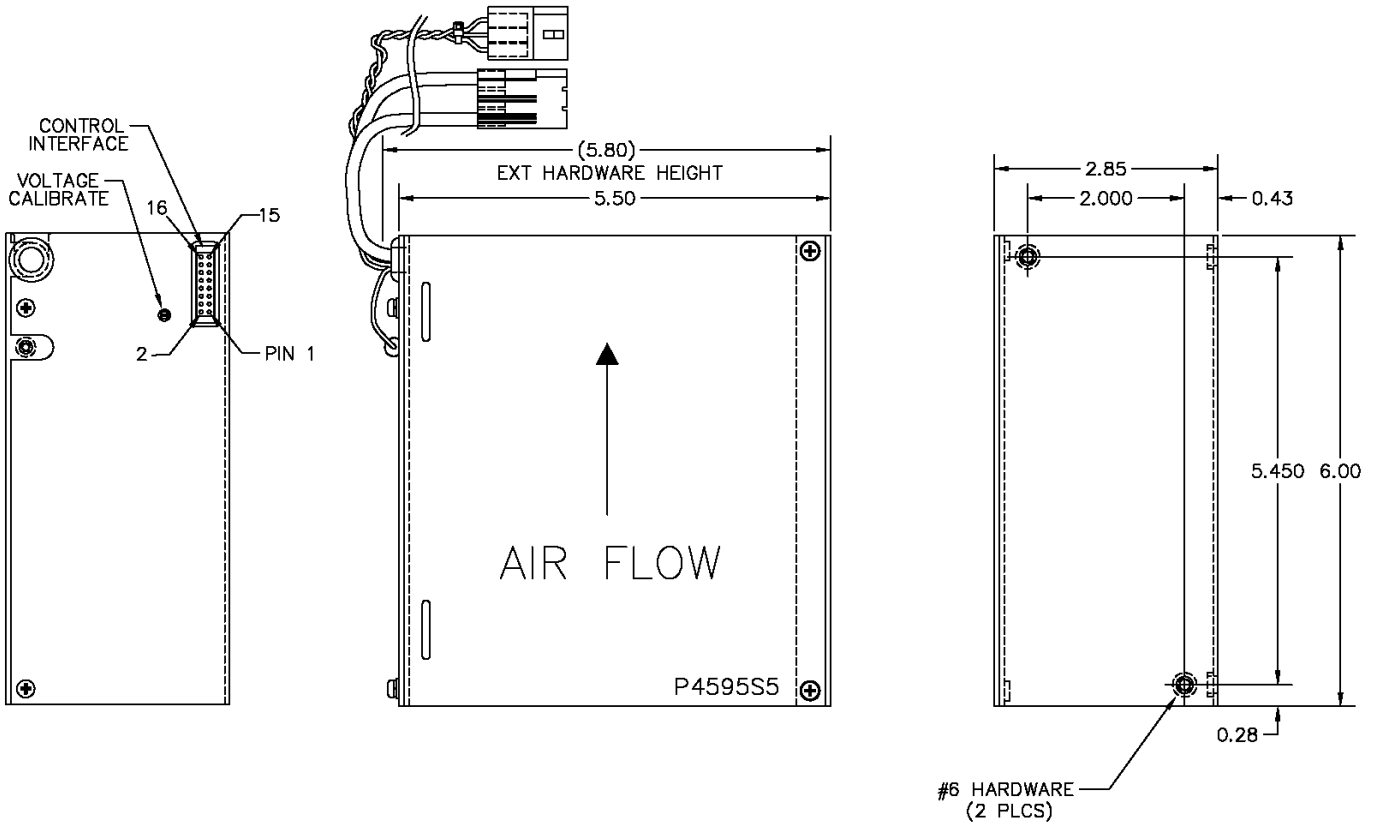
*Constant Voltage Output for Solid-State Lasers*

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

\*See the power derating curve below.

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

Input Voltage: 230 VAC (rectified)  
 Maximum Output Voltage: 1000 VDC  
 Minimum Output Power: 1750 W  
 Module is power factor corrected



**5703/04 IO INTERFACE DESCRIPTION**

PIN	FUNCTION
1	TEMPERATURE TEST POINT
2	DEMAND OUTPUT RETURN
3	DEMAND OUTPUT CONTROL
4	SIGNAL RETURN
5	24V RTN
6	24V RTN
7	PRIMARY INHIBIT
8	PIN 8 IS REMOVED N/C
9	24V INPUT
10	24V INPUT
11	+5V REFERENCE
12	N/C RESERVED
13	OVERTEMP OUT
14	N/C RESERVED
15	END OF CHARGE
16	SECONDARY INHIBIT