



### ISOLATED CAPACITOR CHARGING POWER MODULE

- COMPACT 6.0" x 5.5" x 2.85" PACKAGE
- 1750W NON-POWER FACTOR CORRECTED
- 1500W POWER FACTOR CORRECTED
- C € MARKED AND APPROVED TO UL544 AND EN60601-1 MEDICAL SAFETY STANDARDS
- LOW EMI, ULTRA LOW LEAKAGE CURRENT
- HIGH EFFICIENCY
- MODULAR, EXPANDABLE



### DESCRIPTION:

The **Model 5703** Isolated Capacitor Charging Power Module uses a proprietary power conversion technique to repeatedly charge energy storage capacitors for pulsed, solid-state laser applications. The **Model 5703** provides the highest power density of any capacitor charger on the market and may easily be used with additional modules for high average power applications. The **Model 5703** is designed to meet the isolation and leakage current requirements for the most stringent medical applications. For OEM applications, ask about the AMI **Model 5723**.

### 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., 1500W output (add -PFC to part number)

Uncorrected: 0.65 with 325VDC input, 360VDC max., 1750W output (add -NPFC to part number)

HV Control 0 to 10VDC proportional control with 20kΩ input impedance

Inhibit 3.5 to 24VDC to inhibit with 10kΩ input impedance

#### Cooling Requirements

≥110CFM recommended. Pull air from connector end.

#### Operating Temperatures

0° to +40°C

#### Output

Power (See table on reverse side.)  
Full power available over a large voltage range. (See power derating curve on reverse.)

Voltage (Maximum) 400 to 3000VDC (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.

\*U.S. Patent No. 5,461,297



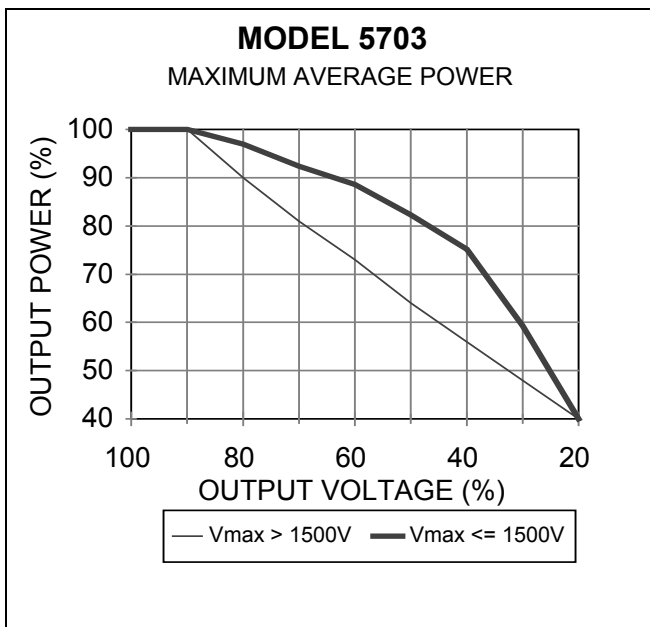
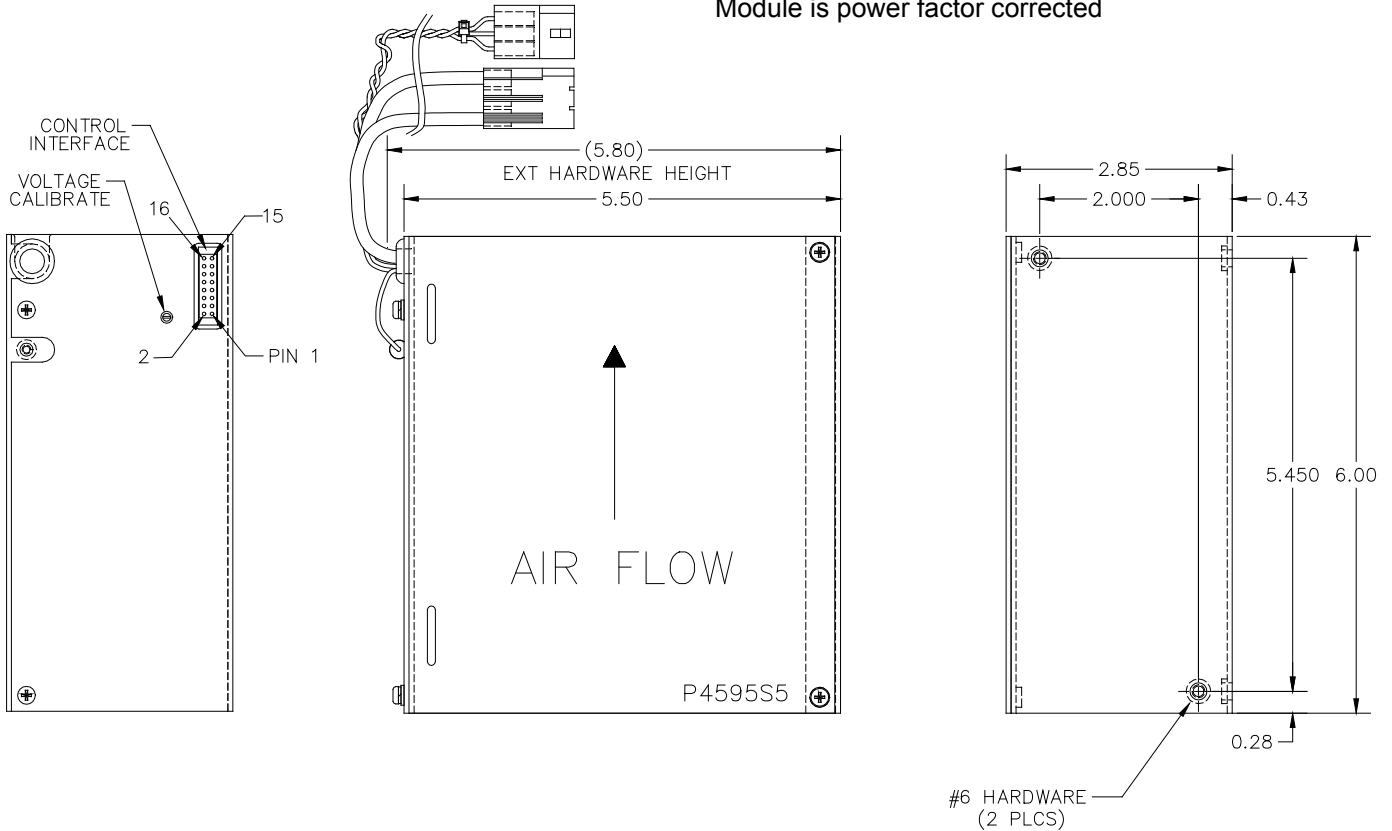
### APPLICATIONS:

*Capacitor Charging for Solid-State Lasers*

		MODEL 5703- XXXX		
		MINIMUM OUTPUT POWER		
Output Voltage (Maximum)	400V to 1500V*	325VDC (-NPFC-D)	230VAC (Rectified) (-PFC-D)	115VAC (Rectified) (-PFC-C)
		1600V to 3000V	1750W	1500W
		1500W	1250W	800W

Typical Part Number: **5703-1500-PFC-D =**

Input Voltage: 230VAC (rectified)  
 Maximum Output Voltage: 1500VDC  
 Minimum Output Power: 1500W  
 Module is power factor corrected



**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