



ISOLATED CAPACITOR CHARGING POWER MODULE

- COMPACT 6.0" x 5.5" x 2.85" PACKAGE
- 1750 W NON-POWER FACTOR CORRECTED
- 1500 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 5703A** 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 5703A** 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 5703A** is designed to meet the isolation and leakage current requirements for the most stringent medical applications. For OEM applications, ask about the AMI **Model 5723A**.

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., 1500 W output
(add -P to part number)
Uncorrected: 0.65 with 325 VDC input, 360 VDC max,
1750 W output
(add -N to part number)

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

Inhibit 3.5 to 24 VDC to inhibit with 10 k Ω 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.)
Full power available over a large voltage
range. (See power derating curve on
reverse.)

Voltage

(Maximum) 400 to 3000 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 μ 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:

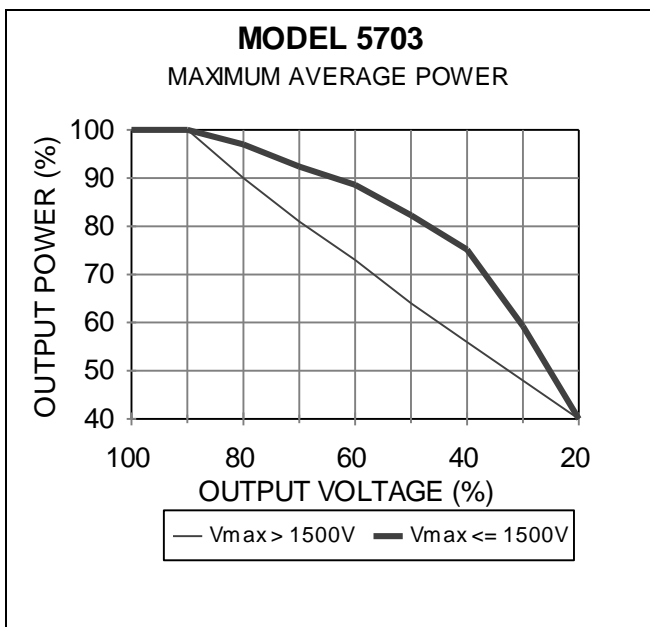
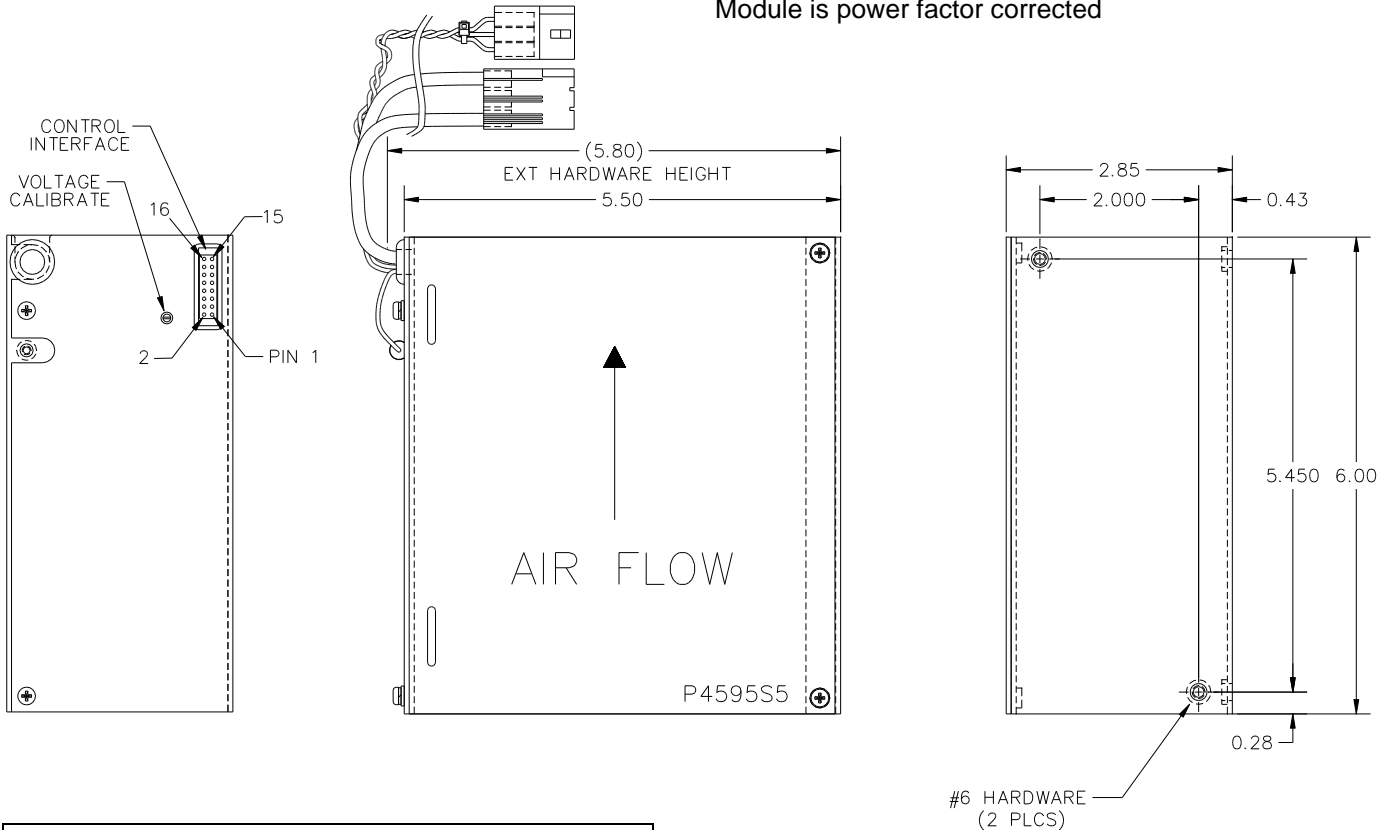
Capacitor Charging for Solid-State Lasers

		MODEL 5703A-XXX-Y-Z		
		MINIMUM OUTPUT POWER*		
Output Voltage (Maximum)	400 V to 1500 V	325 VDC (-N-D)	230 VAC (Rectified) (-P-D)	115 VAC (Rectified) (-P-C)
		1600 V to 3000 V	1750 W	1500 W
		1500 W	1250 W	800 W

*See the power derating curve below.

Typical Part Number: **5703A-1500-P-D =**

Input Voltage: 230 VAC (rectified)
 Maximum Output Voltage: 1500 VDC
 Minimum Output Power: 1500 W
 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