

ISOLATED CAPACITOR CHARGING POWER MODULE

- COMPACT 6.0" x 5.5" x 2.85" PACKAGE
- 1750W NON-POWER FACTOR CORRECTED
- 1500W POWER FACTOR CORRECTED
- CE MARKED 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 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.) 24VDC at 250mA (typical) also required
Power Factor Corrected:	0.9 with rectified 230VAC input, 253VAC max., 1500W output (add -P to part number)
Uncorrected:	0.65 with 325VDC input, 360VDC max., 1750W output (add -N 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

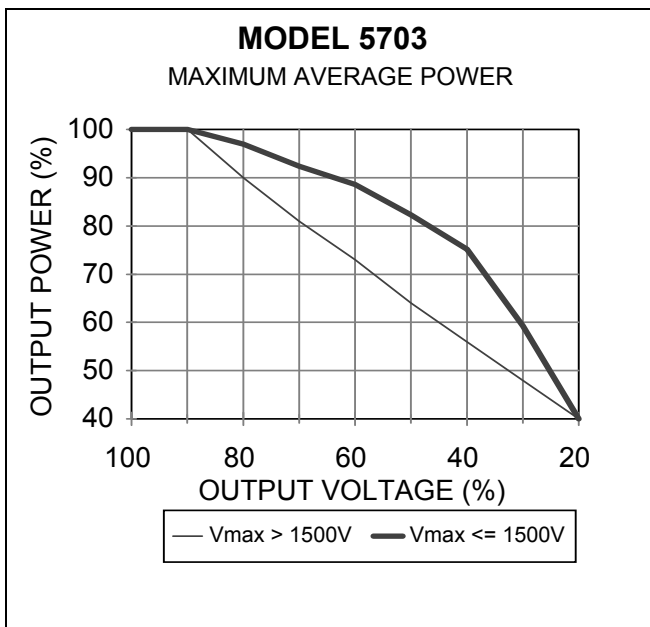
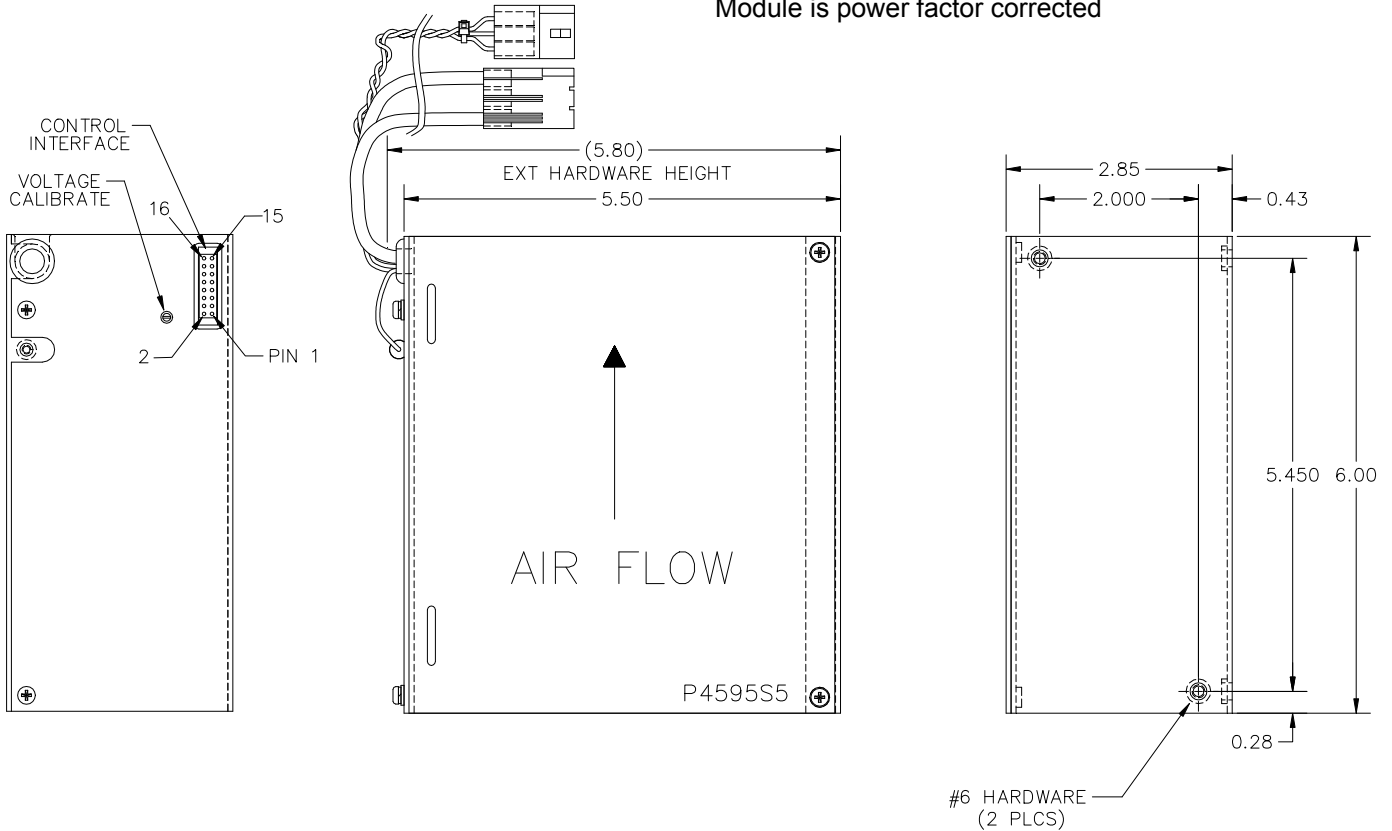
APPLICATIONS:

Capacitor Charging for Solid-State Lasers

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

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