



Dual Output, Dual Polarity High Voltage Power Supply

- Differential Output Voltage up to ± 1 kV
- Maximum Output Power of 125 W
- Up to 90% Efficiency
- RoHS Compliant



DESCRIPTION:

The **Model 533** is a highly efficient, cost effective, voltage regulated, differential output, high voltage power supply capable of providing up to $\pm 1,000$ V at up to 125 W total output power. A scaled voltage monitor output is provided for both positive and negative outputs. Both internal (-INT) and external (-EXT) control options are available for setting the output voltage level. The **Model 533** is ideally suited for providing high voltage power for AMI's **Model 8212A** Pockels Cell Driver.

SPECIFICATIONS:

PARAMETER	MODEL 533			Units
	Min.	Typical	Max.	
INPUT				
Power	+23.0	+24.0	+25.0	VDC
Current	-	-	7.0	A
Control Voltage (-EXT Option Only)	0	-	+5.0	V
Enable (0 to +0.5 V Disable)	+2.4	-	+24.0	V
OUTPUT				
Voltage (Full Output Power) (-1000 Option)	+/- 750	-	+/- 1000	VDC
Voltage (Full Output Power) (-750 Option)	+/- 500	-	+/- 750	VDC
Power (Per Side)	-	-	62.5	W
Current (at 1 kV, Per Side)	-	-	62.5	mA
Voltage Monitor (Scaling = 0 to Max Output Voltage)	0	-	5.0	V
Ripple (at Max Power, Load >0.5 μ F)	-	-	3.0	Vp-p
Overshoot (0 to Max Power, Load >0.5 μ F)	-	-	3.0	Vp-p
Line Regulation (+24 V Input, Max Power)	-	-	0.3	%
Static Load Regulation (No Load to Full Load)	-	-	0.3	%
Efficiency (Max Power)	-	90.0	-	%
Internal Storage Capacitance	0.01	-	-	μ F

Specifications are subject to change without notice.

APPLICATIONS:

High Voltage Capacitor Charging, Pockel Cell Drivers



ENVIRONMENTAL	Min.	Max.	Units
Operating Temperature	-40	+60	°C
Humidity	< 95% Non-Condensing		
Coefficient	+/-50		ppm/°C
ADDITIONAL FEATURES / SPECIFICATIONS			
MTBF	490,060 Hours		
Protection	Under-voltage lockout for power input		
Connections	Output:	5-Pin Molex P/N 39-30-3056 Connector	
	Power:	4-Pin 0.156" center TE Connectivity P/N 640445-4	
	Control/Interface:	10-Pin 3M P/N 30310-5002HB Connector	
Cooling	Forced air cooling required at operation higher than 70W and 25°C		
Size	5.63" x 4.00" x 1.56"		
Weight	9.6oz		

MODEL OPTIONS:

MODEL NUMBER	OUTPUT VOLTAGE RANGE AT FULL OUTPUT POWER	OUTPUT VOLTAGE CONTROL
533-1000-INT	750 V to 1,000 V	On-Board Potentiometer
533-1000-EXT	750 V to 1,000 V	External Control Voltage
533-750-INT	500 V to 750 V	On-Board Potentiometer
533-750-EXT	500 V to 750 V	External Control Voltage

I/O CONNECTIONS:

P1 CONNECTOR			
PIN	FUNCTION	PIN	FUNCTION
1	Enable	6	GND
2	GND	7	+Vmonitor
3	+Demand	8	GND
4	GND	9	-Vmonitor
5	-Demand	10	GND

J1 CONNECTOR	
PIN	FUNCTION
1	+24 VDC
2	+24 VDC
3	24 VDC RTN
4	24 VDC RTN

J2 CONNECTOR	
PIN	FUNCTION
1	+1 kV
2	NC
3	RTN
4	NC
5	-1 kV

MECHANICAL OUTLINE DRAWING:

