

Titan Model

High Speed, High Power Capacitor



Specification Summary

The Titan Power supply is designed for high speed, high power capacitor charging applications at voltages up to 120kV, 45kJ/sec and PRFs as high as 250Hz.

It uses a rugged IGBT based inverter running in resonant mode to achieve high efficiency and excellent ruggedness.

It is designed to run, either from a high DC voltage input (typically 550V), or from a UK/EU 3-phase input.

Input Power

Voltage Source	415Vac three phase mains input

Output Power

Average Power	45000J/sec	
Output Voltage	0 to 60kV	0 to 120kV
Output Current	1.65A maximum	0 to 800mA
Polarity	Positive or negative	
Repetition Rate	250Hz maximum	
Duty Cycle	2 seconds on-load by 2 minutes off-load operation	
Guard Band Protection	200µs fixed after load discharged	
HV Connector	Proprietary connector	
HV Cable	Mating cable and connector supplied with PSU.	
Cable length	3 metres detachable	

Control

Charge Enable	Fibre optic input, active light on
Voltage Program	Adjusted by 10 turn potentiometer with a DVM reading on front panel.
Voltage Monitor	0 to 10V represents 0 to 60kV output through BNC connector
End of Charge	Fibre optic output, active light on

Environment

Operation Temperature	10 to 40°C
Storage Temperature	-10 to 60°C
Humidity	0-90% (non-condensing)
Cooling	Forced air

Mechanical

Height	9U	11U
Depth	560mm (Handles excluded)	780mm (Handles excluded)
Width	19" Rack	605mm
Weight	70kg	100kg