Variable Energy Pulse Charge/Discharge Unit

Variable Energy Pulse Charge/Discharge Unit is a complete charge and discharge unit capable of delivering pulse energy in the range of 2 to 6 Joules through the load. Basic building blocks of the unit include High Voltage Power Supply Module, High Voltage Capacitor, High Voltage Switch, High Voltage Trigger Circuit and Auxiliary Power Supplies – all contained in one unit. The charging unit operates from input DC voltage in the range of 18 – 36 VDC. The output is brought out through a high voltage connector. The load can be connected across the connector. The energy stored in capacitor can be made to discharge through load on application of a TTL/CMOS/28Volt trigger pulse. The unit has Arming/Disarming feature to guarantee safe operation during testing. Additionally, Voltage Monitor Terminals are provided on the panel to monitor status of energy storage capacitor voltage.

Specifications*

- Delivered Energy: 2 to 6 Joules (User Selectable)
- Peak Current Pulse Amplitude: Not less than 3 kA
- Current Pulse Width: 2 ± 0.5 µs
- Input Voltage Range: 18 – 36 VDC
- Operating Temperature Range: −40°C to +85°C
- Input Trigger Pulse: TTL/CMOS/28 Volt pulse

*Customized solutions are offered as per user-defined pulse discharge parameters

Features

- Input trigger pulse optically isolated from high voltage circuitry for enhanced immunity to spurious triggering
- Built-in Arming/Disarming Circuit
- Voltage Monitor with Digital Display
- Battery Operation for Field Use