

50 KJ ULTRA-COMPACT PULSED POWER SUPPLY UNIT FOR VARIOUS APPLICATIONS

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- **Research and Development on Pulsed Power Switches and Supplies**
- **Railguns for military and space applications**
- **High Power Microwaves, e. g. compact MARX-generators (Presentation: R. Bischoff)**
- **ETC (plasma ignition)**



Outline

- **Introduction**
- **Basic Design of the 50 kJ Pulsed Power Supply Unit**
set-up • switching module
- **Ultra-Compact Design**
multichip thyristor • 50 kJ-unit • test results
- **Development Stages**
- **Applications**
- **Summary and Outlook**



Introduction

- **Generation of short pulses in the ten μs range**
- **Modular set-up of the pulsed power supply in order to achieve a high current shaping flexibility**
- **Application of semi conducting switches**
- **Power semiconductors offer advantages over gas discharge switches**
- **Reduction in weight and volume of capacitive driven pulse power supplies in mobile applications**



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