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## 5P07 - Pulsed power supply for 2 kA, 5 MeV linear induction accelerator

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A 2 kA, 5 MeV linear induction accelerator has been built and successfully set in operation in Budker Institute. The accelerator consists of 2 MeV injector and 8 induction cells rated at energy gain up to 380 keV each. The accelerator pulsed power supply is based on an induction adder technique and aimed to supply 96 inductors of the injector and 128 inductors of all induction cells. The 112 pulsed modulators are used for this purpose. Each modulator is able to supply two inductors in parallel with pulsed voltage up to 23.5 kV at 60 ns flat top duration. The operation results of the pulsed power system loaded with a beam current at full energy are described in the paper. The injector and induction cells operation data are presented. Also paper describes the tested parameters of the basic modulator's elements such as pseudospark switches operated at voltage up to 43 kV and anode current up to 8 kA, and low impedance lumped PFNs based on mixed paper-film cells with oil impregnation.

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