**SHORT PULSE MAGNET POWER SUPPLIES**

_CERN has developed a family of 4-quadrant Magnet Power Supplies with very stringent specifications for the needs of particle accelerators such as linacs, synchrotrons, cyclotrons and particles sources._

_These power supplies are controlled using the FGC control system (Function Generator Controller) developed at CERN. CERN has developed a software layer to ease FGC integration with the EPICS and TANGO frameworks. In addition, software tools for remote monitoring and performance analysis are available._

_Complete manufacturing folders are available for the following five types of power supplies. They can be licensed to interested industrial partners._

- **MidiDisCap** a Pulsed Current power supply, 50A for 5ms at 2Hz repetition rate.
- **MaxiDisCap** a Pulsed Current power supply, 320A for 5ms at 10Hz repetition rate.
- **Sirius P2P** a Pulsed Current power supply, 1000A for 12ms at 1.1Hz repetition rate.
- **Sirius FP2P2S** a Pulsed Current power supply, 3000A for 12ms at 1.1Hz repetition rate.
- **MegaDisCap** a Pulsed Current power supply, 2000A for 30ms at 2Hz repetition rate.

_Other current levels can be obtained by adding a pulse transformer in series with the magnet._

**CONTACT PERSON**

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Find out more at:

[kt.cern](http://kt.cern)
FEATURES

- Sophisticated and flexible controls using FGC controllers.
- Pulse timing can be provided via cables to the FGC control crate.
- Seamless integration with the most commonly used controls frameworks (EPICS, TANGO).
- Powerful software tools allowing remote configuration and software updates and handling of one or more power supplies.
- Designs used and maintained at CERN for a period of 20 years or more. Both hardware and software components of the controls framework are regularly upgraded and improved.
- Reliable and proven designs operating for over ten years under very demanding conditions in the CERN accelerators.

APPLICATIONS

- Powering conventional magnets (bumpers, quadrupoles, dipole).
- Powering septum magnets.
- Powering particles sources.