
KEK ATF2 High Availability DC Magnet Power Supplies

2nd Project Meeting

Power Supply Summary

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Summary

Progress

Since the April 29 – 30 meeting at SLAC the accomplishments include:

- 200A operation*
- Temperature stability better than 1ppm/C*
- > 90% module efficiency*
- Input power defined as 420V, 60A and 120V, 20A per rack*
- Alternate rack layout shows 3 fewer bulk power supplies, PLC for bulk PS*
- Contacted candidate power supply manufacturers - at least two will be on-board. Expect to hear from others by the end of June.*

Summary (continued)

Specification Development

- *Formal specifications are in progress for Bulk PS, modules, crates. SLAC is still on target for an end of July issuance.*
- *Specifications and software written for Ethernet controller, CD given to KEK. Note that the specifications might change*
- *SLAC proposed a PLC for control and monitoring of the bulk power supplies. The PLC will have an Ethernet interface. KEK agreed to this approach.*
- *SLAC asked to keep the demonstration system for continued testing until August. KEK is considering the SLAC request.*

Shared Responsibilities

- *A shared responsibilities spreadsheet was prepared. SLAC – KEK managers are filling out the spreadsheets with the pertinent tasks, responsible individuals and key completion dates*

Summary (continued)

Action Items

- *KEK wants remote and local on/off control of each module. SLAC will look into the this will advise KEK if this possible*
- *SLAC asked for a layout of the facility in order to ensure the account for cable length when sizing the power supplies. KEK will send a CAD file of ATF area in DXF format.*