

Power supplies for the Calorimeters

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LAL

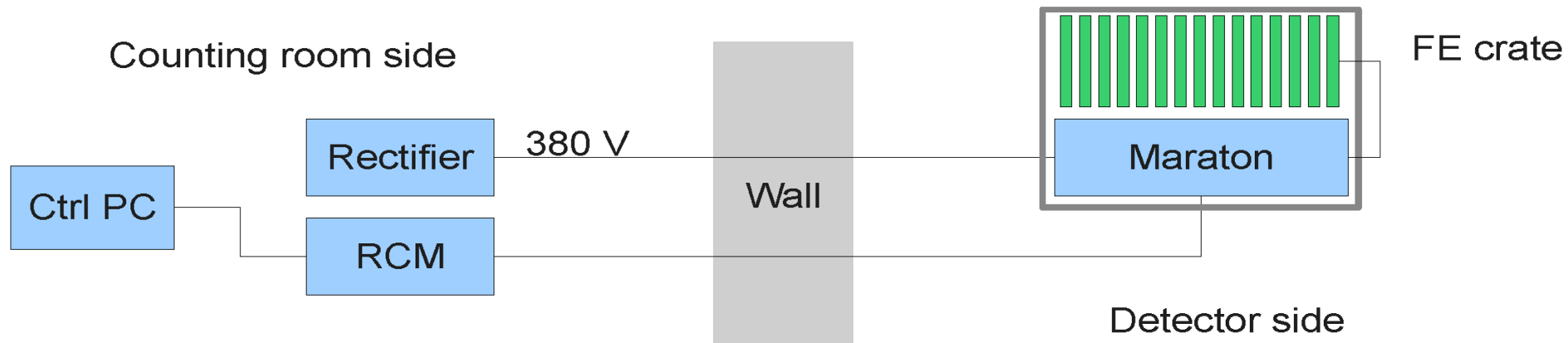
Upgrade design

- The upgrade concerns the ECAL HCAL front-end electronics boards only
 - We want to keep mostly unchanged the rest of the electronics
 - Crates and backplanes are kept.
 - We keep the power supplies
 - We only modify the voltage settings of the modules (6).
- The PS and SPD detectors are removed.
 - The power supplies are identical and can be used as ECAL HCAL spares.

Maraton configuration

- Present Power Supplies configuration: 6 modules (50 Amps)
 - +5 (Analog) / 100 A (2 modules)
 - -5 (Analog) / 50 A (1 module)
 - +3.3 (Digital) / 100 A (2 modules)
 - +5 (Digital) / 50 A (1 module)
- Futur design:
 - Presently our ADC are directly powered by the Maraton (no regulator) without any effects especially on noise.
 - Keep the present Maraton: 6 modules
 - Change the configuration in order to power
 - Partly our electronics directly
 - Partly the electronics through the DCDC convertors

Powering scheme



- We would like to keep the full system as spare (Rectifier, RCM and Maraton)
- The power supplies will be 12 years old in 2018.
- We push for an extension of the maintenance contract between Wiener and Cern (pool).