

ATALS RPCs @ GIF++

Test plan → impact issued [57364](#)

-gamma rate needed (gamma cm⁻² s⁻¹)

small: from 1.6M to 8M

large: from 0.4M to 2M

-services needed (electricity, network, gas, ...)

- small (HV, LV, network, RPC gas 10 l/h, secondary gas for test purposes 10 l/h, DAQ: 32 channels of TDC 100 ps+ 32 channels of CAEN digitizer (owned))
- large (HV, LV, network, RPC gas 100 l/h, secondary gas for test purposes 50 l/h DAQ: 540 channels of TDC 100 ps)

-dimension of the setup that you plan to install in the bunker

- small 50x20x15cm³ on a stand
- large 120x60x30cm³ on a stand

-indicative start and end date

large --> june

small --> november

Other Details

dimension of the electronic you will be installing in the electronic service area (how many racks/creates?)

DCS: an easy crate in daisy chain with the central DCS. Eventually we can add 1 HV and 1 LV module to the existing crate (7 slots). Current readout hosted by the central DCS 2 slot of 8 channels requested.

-dimension of the gas system you will be installing in the gas service area (if any)

- Using central gas system for the RPC gas

- secondary gas system for ternary mixture + humidity in common with CMS. Proposed as a fixed setup for the GIF++

-time needed for the installation of the setup in the bunker

3 days after preparation area, including debugging under radiation not needing the beam.

-are you interested in gamma and/or muon beam → both

-foreseen duration of the test → 2 weeks