

STAR Infrastructure Issues

Rack Assembly Dimension :

- Single Bay Rack Dimension – 22”W x 48”H x 36”deep
- Double Bay Rack Dimension – 46”W x 48”H x 36”

deep

Proposed Location for TOF LV System Racks :

- South Platform – 3rd Story
- Floor plan – 3 Rack Rows w/ 4–Double Bay + 1–Single Bay each row

TOF LV Power Supply Form factor :

- 120 supplies x 2U each

Proposed TOF LV Power Supply Rack Occupancy (26U (~45.5”) Total) :

- 6ea. 2U Power Supply Units
- 2ea. 1U Fan Tray Units
- 2ea. 1U Heat Exchanger Units
- 2ea. 1U Air Filters
- 1ea. 1U Interlock/Con Unit
- 1ea. 1U Neg Supply Distribution Tray
- 1ea. 1U Air Intake Space
- 1ea. 5U P–2 Breaker Panel

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(cont.)

Estimated number of Racks Required for LV Power Supply :

- Double Bay Racks = 9 min
- Single Bay Racks = 2 min

Estimated remaining rack space for additional instrumentation:

- Double Bay Racks = 3 total
- Single Bay Racks = 1 total

Cable Tray :

- Use of existing cable tray located under removable floor boards on 3rd story.
- Installation of additional cable tray will be required at various locations at platform and at points along cable path to TOF trays.

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AC Power to Platform : (cont.)

- All P-2 panels will be fed from low profile, “clean power” sub-panels to be installed on 3rd story platform

Interlocks:

- Interface to STAR Global Interlock will be required for LV Power System, including protection for water flow and fan enable
- Trace-tek wire will be installed at each rack location
- Smoke detection will be installed in each rack
- All racks will be “closed” racks

Cooling :

- Heat Exchange Units coupled to STAR MCW system
- Plumbing for MCW, to each rack stand pipe connection is required
- Fan Tray Units installed in each rack to provide air flow