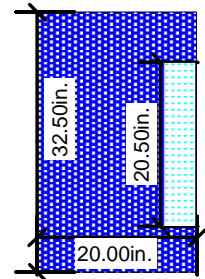
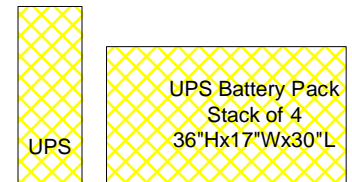
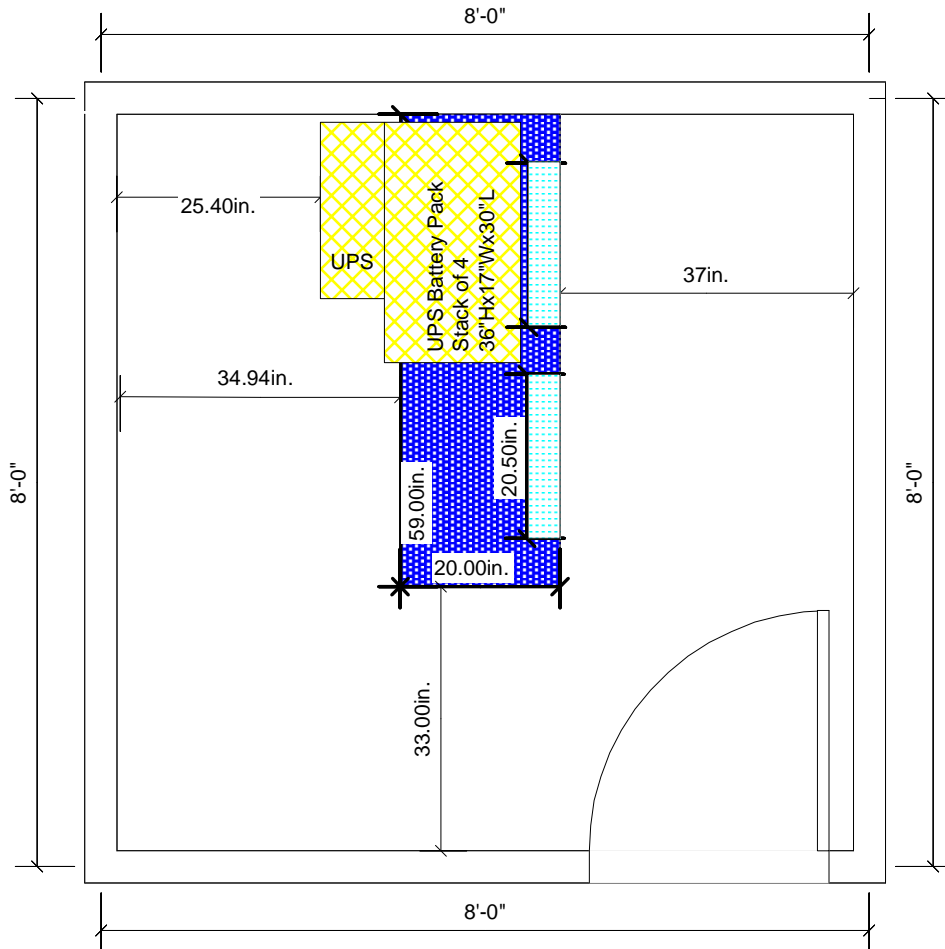


Medium Density IDF/MDF



This represents a standard 19" telecom rack which has a total width of 20.5". It allows for a 32.5" of total width that includes 6" vertical wire management tray that will be added on either side of a single rack. It also allows for a total of 20" in depth based on the average depth of the equipment that will be installed in the racks.

* If two racks are installed side by side only one 6" vertical wire management tray will be installed between the two racks. This will reduce the combined rack width by 6" for each rack in the row.



This represents an APC SmartUPS XL 2200 with 4 Ultra Battery Packs. Each battery pack is 12" high X 17" wide X 30" in length and can be stacked on top of one another. The UPS is 17" high X 8" wide X 22" in length. This will sit behind the battery packs. Assume about 8" of space between the wall and UPS or battery packs for cables.

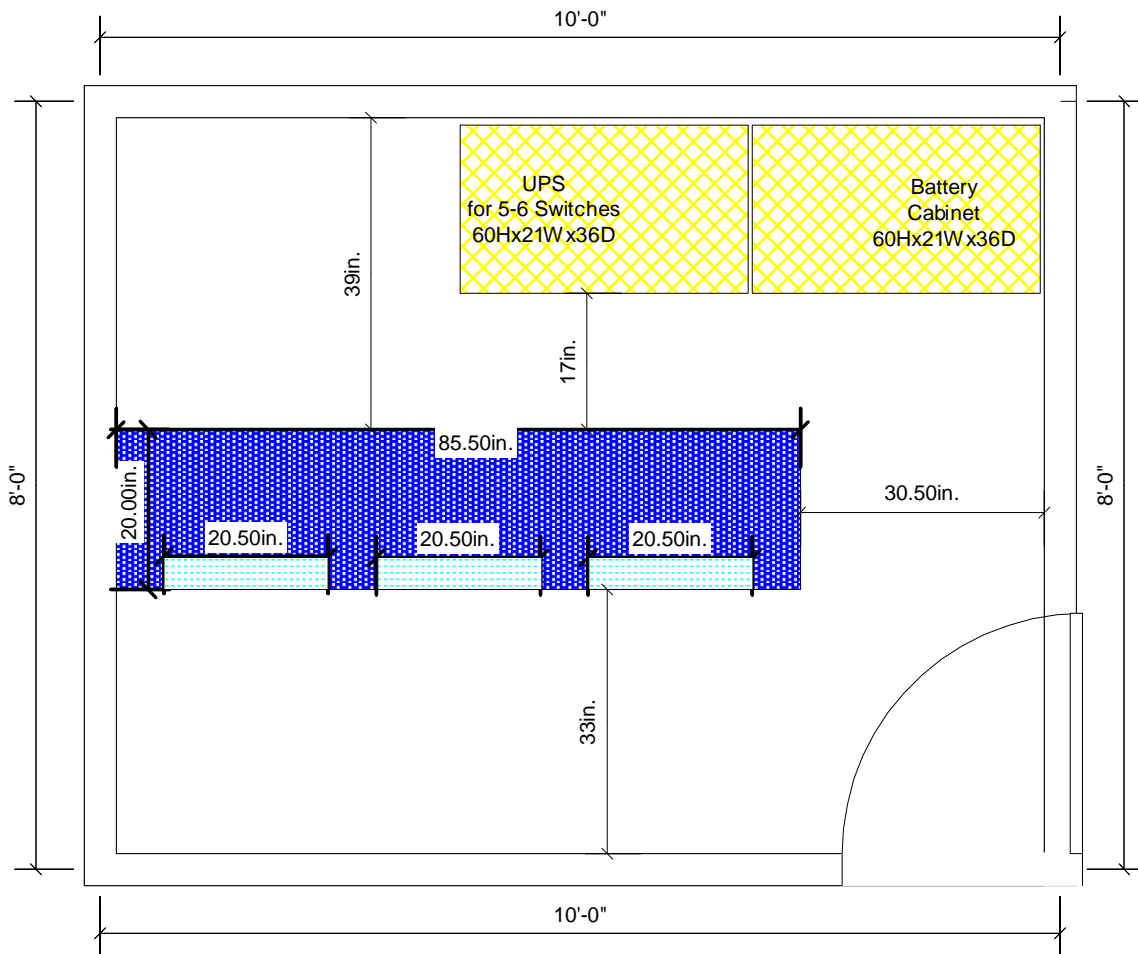
This UPS should be able to power 3-48port PoE Switches fully loaded with IP telephones for 6-8 hours.

Medium Size MDF/IDF (8X8 minimum)

- 2 Floor Mounted 19" Racks 96"H
- Vertical Cable Mgt: 6" each side and inbetween
- SmartUPS XL 2200 : 17"Hx22"Dx8"W
 - + Placed on floor behind the rack
- UPS Battery Pack: 12"Hx30"Dx17"W
 - + Placed on floor behind the PoE rack stacked upto 4
 - + Max 3 PoE Switches

Drawing Scale is 1/2" = 1'

High Density MDF/IDF



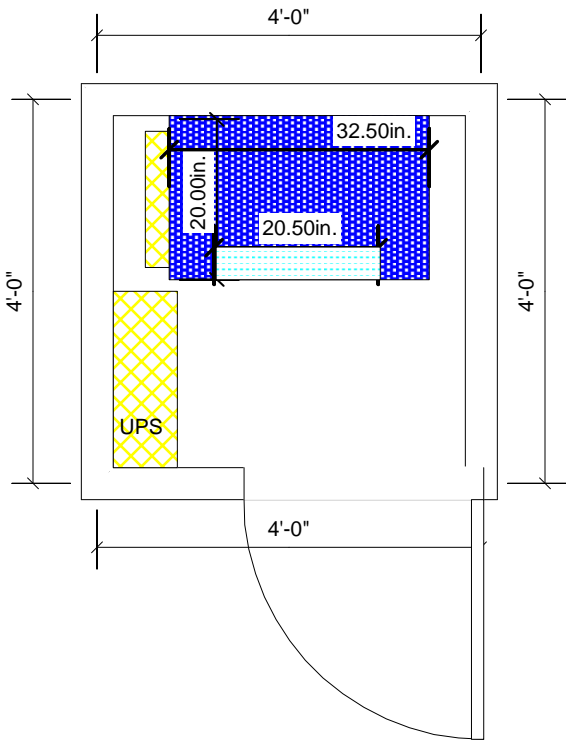
Large MDF/IDF (preferred 10x10, minimum 10x8)

- 3 Floor Mounted 19" Racks 96"H
- Vertical Cable Mgt: 6" each side and in-between
- SmartUPS VT 10kva with Battery Cabinet: 60Hx21Wx36D each.
 - + Placed behind the racks
 - + Max 6 PoE switches (288 PoE connections)
 - For 5-6 PoE Switches it would be better if the IDF/MDF was 10x10
 - + Max 16 non-PoE Switches (768 connections)
 - + These Maximums allow no room for growth, which would be undesirable.

Drawing Scale is 1/2" = 1'

4 X 4 IDF Closet

- Wall Mount Rack: 36"Hx20"Dx20.5"W
- Vertical Cable Mgt: 4-6" each side
- SmartUPS XL 750 : 9"Hx17"Dx7"W
- UPS Battery Pack: 12"Hx30"Dx17"W
- + Placed on floor beneath the wall mounted rack
- An IDF of this size is only suitable when there are less than 48 ports of Voice and/or 48 ports of data. In other words no more than two switches total (1 PoE switch, and 1 non-PoE switch).



Small IDF Low Density of both Voice and Data

6 X 6 IDF Room

- 1 Floor Mounted 19" Rack: 96"H
- Vertical Cable Mgt: 6" each side
- SmartUPS XL 2200 : 17"Hx22"Dx8"W
- + Placed on floor beside the rack
- UPS Battery Pack: 12"Hx30"Dx17"W
- + Placed on floor beside the rack
- An IDF of this size is only suitable when there are less than 96 PoE ports (2 switches) and no more than 4 switches total.

