



VA PROJECT NUMBER 621-24-701 (2409)
 PROJECT NAME EHRM Infrastructure Upgrades - Tier 3 Mountain Home, TN
 SUBMITTAL Final Bid Documents
 SUBJECT Server & TR – Electrical load estimation

Server Room

Devices/Equipment	Quantity	Average Estimated Load (W)	**Demand Factors	Estimated Demand Load (W)
Modem/Demarc	0	500	100%	0
Server Cabinets	19	3500*	63%	41895
HDA Network Cabinets	4	2800*	63%	7056
MDA Network Cabinets	6	3500*	63%	13230
Misc. Telecom Equip	--	3500	100%	3500

*kW heat load for Generic Small Data MCR as electrical Loads.

**Demand Factors deduced from Spur Design Historical and Metering Data.

Sub total (W)	65681
10% future Growth (W)	6568.1
Total Estimated UPS Load (W)	72249
Total Estimated UPS Size (@85% Design Capacity)	90 kW

Server Room

Load Type	Quantity	VA	NEC Demand Load (VA)	
			Table 220.44	Table 220.42
Receptacle/Plug	17	180	3060	--
Lighting	21	34	--	893
Miscellaneous ¹	--	5,000	5000	--
HVAC ¹	1	76,800	76800	--

¹ Indicate loads estimated at 100% Demand

Total Estimated MCR Load (kVA)	158 kW
Total Estimated MCR Load* (A)	439 A

*Estimated for a 208V, 3-phase distribution system