

Serverfarm ARK1: Technology Room Load Calculation						
PRELIMINARY LOADS ISSUED: 1.23.2026						
POE1-107						
Item Number	Description	Quantity	Estimated Load per device (W)	Estimated Heat per device (BTU/Hr)	Estimated Electrical Demand (W)	Estimated Mechanical Demand (BTU/Hr)
1	Passive Gear Only	4	0	0	0	0
<b>TOTAL LOAD:</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.00</b>						
POE1-151						
1	Passive Gear Only	4	0	0	0	0
<b>TOTAL LOAD:</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.00</b>						
POE1-176						
1	Passive Gear Only	4	0	0	0	0
<b>TOTAL LOAD:</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.00</b>						
POE1-177						
1	Passive Gear Only	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.00</b>						

Serverfarm ARK1: Technology Room Load Calculation						
PRELIMINARY LOADS ISSUED: 1.23.2026						
MMR A						
Item Number	Description	Quantity	Estimated Load per device (W)	Estimated Heat per device (BTU/Hr)	Estimated Electrical Demand (W)	Estimated Mechanical Demand (BTU/Hr)
1	48P QSFP Core Switch	1	600	2049	480	1639.2
2	48P Fiber Switch	2	600	2049	960	3278.4
3	48P Edge Network Switches	6	530	1809.95	2,544	8687.76
4	Firewall	1	190	648.85	152	519.08
5	VM Ware Server	3	1,800	6147	4,320	14752.8
6	Synology Server	1	181	616.075	144	493.126
7	Synology Expansion	1	94	321.01	75	256.808
8	Seagate Server	1	2,000	6,830	1,600	5464
9	Seagate Expansion	1	1,160	3,961	928	3169.12
10	Network Management Device	4	25	85	80	273.2
11	Wireless Controller	1	100	342	80	273.2
12	Security Wall Field	1	1,000	3,415	700	2,391
13	Unit Gateway	1	17	58	14	46.444
14	Spare/ Service Provider Cabinets	4	4,900	16,734	15,680	53547.2
<b>TOTAL LOAD:</b>			<b>27,887</b>	<b>95,132</b>	<b>9,132</b>	<b>30,788</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 7.93</b>						

Serverfarm ARK1: Technology Room Load Calculation						
PRELIMINARY LOADS ISSUED: 1.23.2026						
MMR B						
Item Number	Description	Quantity	Estimated Load per device (W)	Estimated Heat per device (BTU/Hr)	Estimated Electrical Demand (W)	Estimated Mechanical Demand (BTU/Hr)
1	48P QSFP Core Switch	1	600	2049	480	1639.2
2	48P Fiber Switch	2	600	2049	960	3278.4
3	48P Edge Network Switches	3	530	1809.95	1,272	4343.68
4	Firewall	1	190	648.85	152	519.08
5	VM Ware Server	3	1,800	6147	4,320	14752.8
6	Synology Server	1	181	616.075	144	493.126
7	Synology Expansion	1	94	321.01	75	256.808
8	Seagate Server	1	2,000	6,830	1,600	5464
9	Seagate Expansion	1	1,160	3,961	928	3169.12
10	Network Management Device	4	25	85	80	273.2
11	Wireless Controller	1	100	342	80	273.2
12	Security Wall Field	1	1,000	3,415	700	2,391
13	Unit Gateway	1	17	58	14	46.444
14	Spare/ Service Provider Cabinets	4	4,900	16,734	15,680	53547.2
<b>TOTAL LOAD:</b>			<b>26,585</b>	<b>90,788</b>	<b>9,132</b>	<b>30,788</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 7.57</b>						

Notes:  
1. Refer to the technology drawing IT room enlarged plans for receptacle connection, NEMA outlet configuration, and outlet location details.  
2. Where specified, IT IDF room electrical circuits must be fed from the on-site, stand-by emergency generator system.  
3. All IT-AV room branch circuits must be dedicated circuits with dedicated neutrals.  
4. All IT-AV rooms require a wall mounted telecommunications ground bus (TGB) connected to the electrical base-building ground source.  
5. Loads are estimates based on information provided by the client, equipment specification sheets and industry best practices. Loads shall be used for approximate mechanical and electrical equipment sizing only. Final field loads may vary.  
6. Demand kW and BTU/hr are for discussion purposes only and must be verified by the electrical and mechanical engineer.

Serverfarm ARK1: Technology Room Load Calculation						
PRELIMINARY LOADS ISSUED: 1.23.2026						
IDF1-159						
Item Number	Description	Quantity	Estimated Load per device (W)	Estimated Heat per device (BTU/Hr)	Estimated Electrical Demand (W)	Estimated Mechanical Demand (BTU/Hr)
1	48P Edge Network Switches	4	530	2,049	1,484	5,737
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>3,066</b>	<b>9,189</b>	<b>3,066</b>	<b>9,189</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.77</b>						
IDF1-165						
1	48P Edge Network Switches	3	530	2,049	1,113	4,303
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>2,695</b>	<b>7,755</b>	<b>2,695</b>	<b>7,755</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.65</b>						
IDF1-175						
1	48P Edge Network Switches	3	530	2,049	1,113	4,303
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>2,695</b>	<b>7,755</b>	<b>2,695</b>	<b>7,755</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.65</b>						
IDF1-176						
1	48P Edge Network Switches	3	530	2,049	1,113	4,303
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>2,695</b>	<b>7,755</b>	<b>2,695</b>	<b>7,755</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.65</b>						
IDF1-185						
1	48P Edge Network Switches	3	530	2,049	1,113	4,303
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>2,695</b>	<b>7,755</b>	<b>2,695</b>	<b>7,755</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.65</b>						
IDF1-191						
1	48P Edge Network Switches	4	530	2,049	1,484	5,737
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>3,066</b>	<b>9,189</b>	<b>3,066</b>	<b>9,189</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.77</b>						

Serverfarm ARK1: Technology Room Load Calculation						
PRELIMINARY LOADS ISSUED: 1.23.2026						
IDF2-106						
Item Number	Description	Quantity	Estimated Load per device (W)	Estimated Heat per device (BTU/Hr)	Estimated Electrical Demand (W)	Estimated Mechanical Demand (BTU/Hr)
1	48P Edge Network Switches	3	530	2,049	1,113	4,303
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>2,695</b>	<b>7,755</b>	<b>2,695</b>	<b>7,755</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.65</b>						
IDF2-112						
1	48P Edge Network Switches	4	530	2,049	1,484	5,737
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>2,695</b>	<b>7,755</b>	<b>2,695</b>	<b>7,755</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.77</b>						
IDF2-118						
1	48P Edge Network Switches	3	530	2,049	1,113	4,303
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>2,695</b>	<b>7,755</b>	<b>2,695</b>	<b>7,755</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.65</b>						
IDF2-128						
1	48P Edge Network Switches	3	530	2,049	1,113	4,303
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>2,695</b>	<b>7,755</b>	<b>2,695</b>	<b>7,755</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.65</b>						
IDF2-129						
1	48P Edge Network Switches	3	530	2,049	1,113	4,303
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>2,695</b>	<b>7,755</b>	<b>2,695</b>	<b>7,755</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.65</b>						
IDF2-138						
1	48P Edge Network Switches	4	530	2,049	1,484	5,737
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>3,066</b>	<b>9,189</b>	<b>3,066</b>	<b>9,189</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.77</b>						
IDF2-144						
1	48P Edge Network Switches	4	530	2,049	1,484	5,737
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>3,066</b>	<b>9,189</b>	<b>3,066</b>	<b>9,189</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.77</b>						
IDF2-151						
1	48P Edge Network Switches	3	530	2,049	1,113	4,303
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>2,695</b>	<b>7,755</b>	<b>2,695</b>	<b>7,755</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.65</b>						

Notes:  
1. Refer to the technology drawing IT room enlarged plans for receptacle connection, NEMA outlet configuration, and outlet location details.  
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Serverfarm ARK1: Technology Room Load Calculation						
PRELIMINARY LOADS ISSUED: 1.23.2026						
IDF2-106						
Item Number	Description	Quantity	Estimated Load per device (W)	Estimated Heat per device (BTU/Hr)	Estimated Electrical Demand (W)	Estimated Mechanical Demand (BTU/Hr)
1	48P Edge Network Switches	3	530	2,049	1,113	4,303
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>2,695</b>	<b>7,755</b>	<b>2,695</b>	<b>7,755</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.65</b>						
IDF2-112						
1	48P Edge Network Switches	4	530	2,049	1,484	5,737
2	Security Wall Field	1	1,000	3,415	700	2,391
3	Network Management Device	2	150	512	210	717
4	POE Injector	2	480	246	672	344
5	ATS	0	0	0	0	0
<b>TOTAL LOAD:</b>			<b>2,695</b>	<b>7,755</b>	<b>2,695</b>	<b>7,755</b>
<b>ESTIMATED TOTAL MECHANICAL DEMAND (TONS): 0.77</b>						
IDF2-118						
1	48P Edge Network Switches	3	530			