

LITEMINDER HT SINGLE PHASE

3,200VA – 10,000VA Central High-Temperature/BABA Inverter System

The LiteMinder High-Temperature (HT) Central Inverter System builds on the proven LiteMinder platform by incorporating advanced high-temperature battery technology to deliver a dependable life-safety emergency power solution for elevated-temperature environments. Engineered for continuous ambient operation up to 60°C, the HT batteries offer a 10-year design life supported by a comprehensive 10-year warranty (five years full and five years pro-rata), directly addressing the significant performance degradation experienced by standard VRLA batteries when operating above the ideal 25°C average. Conventional VRLA batteries are designed to tolerate only very limited temperature excursions above 25°C, with each 5°C increase reducing battery life by approximately 30%; consequently, a standard VRLA battery operating at 33°C may see its expected service life reduced to roughly five years. In nonclimate-controlled electrical closets—where temperatures frequently exceed 35°C—this degradation is common, whereas the LiteMinder HT system maintains reliable performance and extended service life. This expanded temperature capability provides greater installation flexibility, allowing for optimum service life and operation in electrical spaces without air conditioning, while full BABA compliance further reinforces LiteMinder HT as a benchmark for engineering excellence and reliability beyond traditional inverter systems.

DESCRIPTION

- **Modularity:** LiteMinder features unique inverter modules available in increments from 3,200VA to 10,000VA capacities. Modules are interconnected to build the required system capacity, and can even be field upgraded to increase system sizes!
- **Control Features:** A keypad and LCD display provides user interface and extensive status diagnostics. Self test, Self-Diagnostics, in compliance with UL 924, is field configurable.
- **Web Site Monitoring:** Unique web interface constantly monitors the system status and records all essential data. Users can log on, view, interact and download records as needed. The factory can also monitor, diagnose remotely. Website monitoring free on every inverter (must use option code LGM).
- **Diagnostics:** In addition to Self-test, Self-Diagnostics, LiteMinder also includes unique startup diagnostics to aid in installation and maintenance: eight individual startup alarms (Communications, Set-Up Conflict, Low Battery, Back-feed, Transfer/AC Fuse, Short/Overload, Miswire, Incorrect AC Input) eight individual Charger Alarms and eight individual Inverter Alarms.



SPECIFICATIONS

- PWM MOSFET and IGBT (Model Dependant) Inverter provide Pure Sine Wave output with less than 3% THD, and fully compatible with LED Lighting Loads
- Fast transfer for H.I.D. compatibility ensures smooth operation of combined lighting loads, transfers in less than 2 mS
- Less than 3% THD, load power factor 0.5 Lag to 0.5 Lead, 98% efficient in standby mode
- Automatic Low Voltage Disconnect (LVD) set at 1.67 VPC
- Shorted circuit protected to 65KAIC tested and approved to UL 6180-5-1 standard
- Crest factor >4 for high inrush demanding loads, overload 120 percent for 10 minutes, 400 percent for 500mS
- High-Temperature VRLA Maintenance Free Lead Calcium Battery's provide the required 90 minute minimum run time in EM Mode
- Battery recharge time is less than 24 hours, meets all UL 924 and NFPA101 Life Safety Code requirements
- Operating temperature 20° to 60° C
- Brownout protection set for 85% of the nominal line voltage

FEATURES

- Modular inverter allows operation for single phase operation
- Automatic restart upon utility power return, no need to manually reset the system
- Input circuit breaker is provided sized to system rating
- Monthly and the annual 90 minute test can be programmed by the user for a specific date and time to ensure NFPA Code Compliance
- Up to 1000 events stored in the memory log on a "FIFO" basis, and is easily accessible through the MMI (Man-Machine Interface) Panel
- MMI consists of a 5 button keypad for easy menu navigation
- A 4x20 backlit White display with heads-up LED's allow for a quick diagnosis of the system status and alarms

FEATURES (CONTINUED)

- Five LED indicators provide the status of the Inverter, Charger, AC present, Ready, and Switched Load (if provided with Switched Output Circuit Breakers)
- An additional six LED indicators provide the alarm status for Alarm Summary, Bypass (if equipped with Maintenance Bypass option), CB Trip, Startup Fault, Charger Fault, and Inverter Fault
- A dedicated System Test button is provided for a user initiated 30 second on demand test
- An Alarm On/Off LED is provided to indicate that an alarm is present.
- A dedicated Alarm Silence On/Off push button allows the user to silence the audible alarm
- SD card slot allows the user to download all Test, Event and Alarm Logs

CERTIFICATION

- UL924 compliant Self-Test/Self-Diagnostics are standard, with interactive LCD display (MMI)
- Listed to UL924, and meets NFPA101 Life Safety Code, NFPA70-NEC and OSHA Requirements, 1.0-2.8KVA models meet CSA C22.2 No. 141-10

- Build America, Buy America Act (BABA) Compliant
- Buy American Act (BAA) compliant
- Trade Agreements Act (TAA) compliant

WARRANTY

- Electronics are warranted for 2 years, extended out to 3 years with the purchase of factory startup. VRLA batteries have a 10-year warranty consisting of 1 year full and 9 years pro-rata – view complete warranty terms online at www.evenlite.com/terms-warranty.
- An extended warranty is available with the purchase of Factory Startup (FS). The Extended Warranty increases electronics coverage to five years. For complete details, please refer to the Central Power Systems Warranty.
- An extended battery warranty is also available, offering coverage periods of either 15 years (EB15) or 20 years (EB20), as specified in the Ordering Guide. This warranty includes one year of full replacement coverage at no charge, followed by 14 (EB15) or 19 (EB20) additional years of pro-rata coverage.

ORDERING GUIDE

Example: LM-10000-1P-HT-IB-OB-S4-TA-FS

MODEL	VA RATING		CONFIGURATION	BATTERY TYPE	INPUT VOLTAGE	OUTPUT VOLTAGE					
LM	3200	3200VA	1P Single Phase ² (L-N)	HT High-Temperature	IA	120V (L-N)	OA	120V (L-N)			
	4200	4200VA			IB	277V (L-N)	OB	277V (L-N)			
	5200	5200VA			IC	208V (L-L-N) ³					
	6250	6250VA									
LM			1P	HT							
OUTPUT BREAKER CONFIGURATION ⁴			OPTIONS								
C(n)	20A Normally On Output Breaker		TA	Trip Alarm for All Circuit Breakers		RA	Remote Annunciator		EB15	15 Year Extended Battery Warranty ¹¹	
O(n)	20A Normally Off Output Breaker		TB	1 Summary/2 Programmable Terminal Block ⁶		KE	Keyed Lock		EB20	20 Year Extended Battery Warranty ¹²	
S(n)	20A Switched Output Breaker		MB	Internal Maintenance Bypass Switch ⁷		BTMS	Battery Thermal Management System		UP	Ship Inverter Less Batteries	
(n)=	Quantity Required		BI	BACnet Integration Module		WM	Wall Mount Kit ⁸		EPO	Emergency Power Off ⁷	
BB	Special Breaker Current Requirement ⁵		LGM	LifeGuard [®] Monitoring		FS	On-Site Startup Commissioning		BL	Output Breaker Locks ¹³	
			DT	60ms Delayed Transfer		EW	5 Year Extended Warranty ⁹		SK	Stacked Cabinet Configuration ^{14,15}	
			Z4	Seismic Zone 4 Certified		M(n)	Maintenance Plan ¹⁰				
ORDERING NOTES											
1 277VAC only				8 1kW only							
2 120VAC or 277VAC				9 Requires On-Site Startup Commissioning [FS]							
3 Only offered on systems up to 6.25 kVA (MUST BE ORDERED WITH OA Output) – For any other configuration please refer to Two Phase spec sheet.				10 N=years (minimum: 2 / maximum: 5)							
4 See Output Breaker Quantity Limitations table				11 1 full year with 14 years pro-rated							
5 Contact factory				12 1 full year with 19 years pro-rated							
6 For form C dry contacts				13 1 provided per output circuit breaker specified							
7 Reduces maximum output breakers by 1. Make before break.				14 Only available with 8,250VA to 12,500VA							
				15 Not Seismic Certified							

Fill in fields from categories above and complete type and part number.

Type No:

Full Part No:

OUTPUT BREAKER QUANTITY LIMITATIONS			
Any Combination Of Output Types			
4200 – 6250VA		8250 – 12500VA	
12X20A	Normally On Without [TA]	24X20A	Normally On Without [TA]
8X20A	Normally Off With or Without [TA]	12X20A	Normally Off With or Without [TA]
8X20A	Switched With or Without [TA]	12X20A	Switched With or Without [TA]
8X20A	Normally On With [TA]	16X20A	Normally On With [TA]

DIMENSIONS, WEIGHT & LOAD CAPACITY

MODEL	NO. OF CABINETS	CABINET WIDTH	CABINET HEIGHT	CABINET DEPTH	CABINET WEIGHT	BATTERY CABINET WEIGHT	TOTAL BATTERY WEIGHT	TOTAL SHIPPING WEIGHT	MAX BTUs HOUR AT FULL LOAD	MAX CONNECTED LOAD	
										90 MINUTE RUNTIME	120 MINUTE RUNTIME
LM-3200	1	32"	50"	23"	315 lbs	-	456 lbs	768 lbs	209	3,200 VA	2,400 VA
LM-4200	1	32"	50"	23"	315 lbs	-	570 lbs	1,059 lbs	286	4,200 VA	3,150 VA
LM-5200	1	32"	50"	23"	315 lbs	-	684 lbs	1,215 lbs	355	5,200 VA	3,900 VA
LM-6250	2	32"	50"	23"	315 lbs	270 lbs	912 lbs	1,371 lbs	426	6,250 VA	4,687 VA
LM-8250	2	32"	50"	23"	365 lbs	270 lbs	1,140 lbs	2,063 lbs	563	8,250 VA	6,187 VA
LM-10500	2	32"	50"	23"	365 lbs	270 lbs	1,368 lbs	2,375 lbs	716	10,000 VA	7,500 VA

INPUT CURRENT & BTU CHART

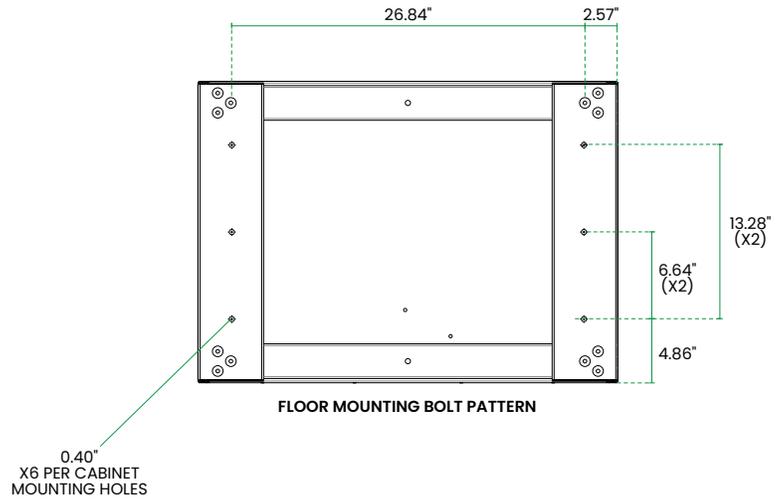
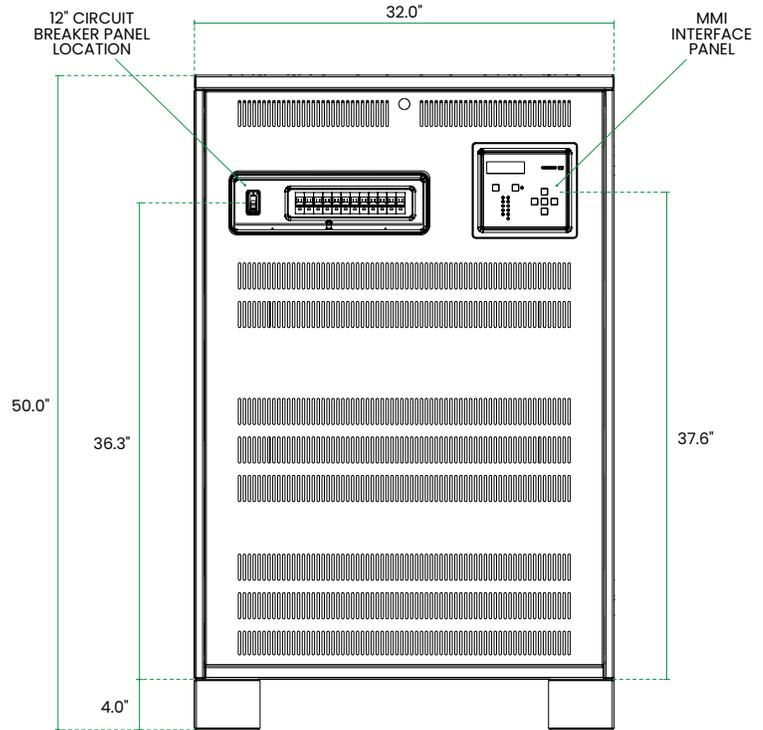
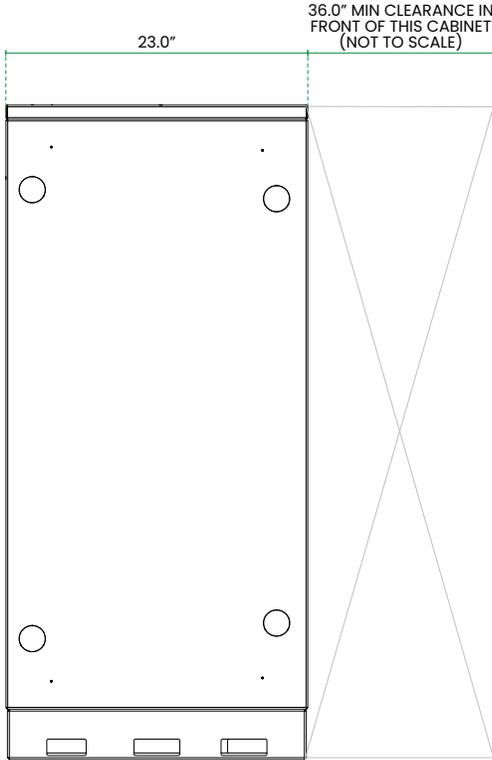
INPUT POWER	INPUT VOLTAGE	INPUT CURRENT	MINIMUM BREAKER REQUIRED	SUGGESTED FEED BREAKER	MAX BTUS HOUR AT FULL LOAD
3200	120	31.3	39.1	40	209
	277	13.5	16.9	20	
4200	120	41.7	52.1	60	286
	277	18.1	22.6	30	
5200	120	52.1	65.1	70	355
	277	22.6	28.2	30	
6250	120	62.5	78.1	80	426
	277	27.1	33.8	40	
8250	120	83.3	104.2	110	563
	277	36.1	45.0	50	
10000	120	-	-	-	716
	277	45.1	56.4	60	

NOTES

- Input Current = Output Current + Max Charge Current
- Suggested Feed Breaker sizes are rounded up in 10 Amp increments
- Input Power requires 3 wires, Neutral and Ground. Neutral is passed through and current carrying - Feeder Neutral to be sized same as line conductors.
- KAIC Rating for all models = 65KAIC (UL rated per UL 61800-5-1)
- Short Circuit current rating = 65KA for ALL models.

DIMENSIONS

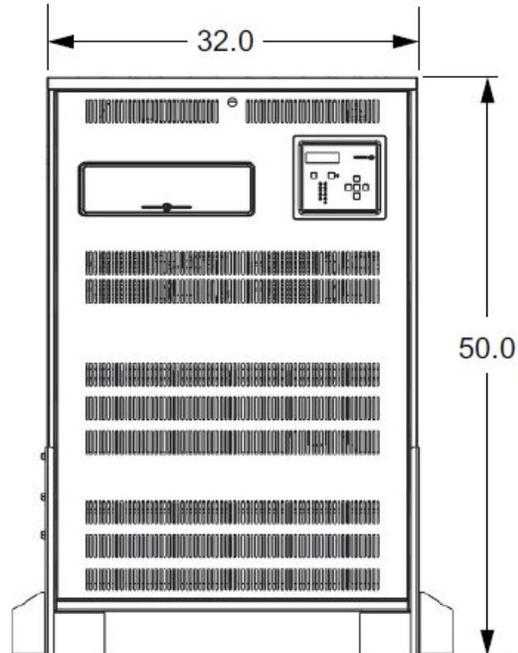
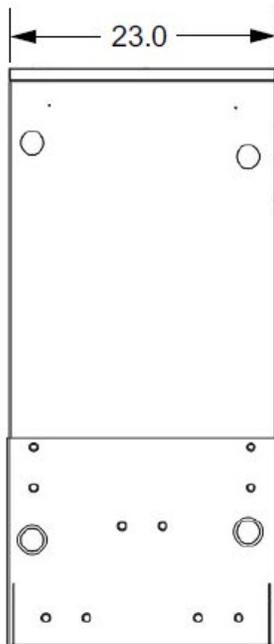
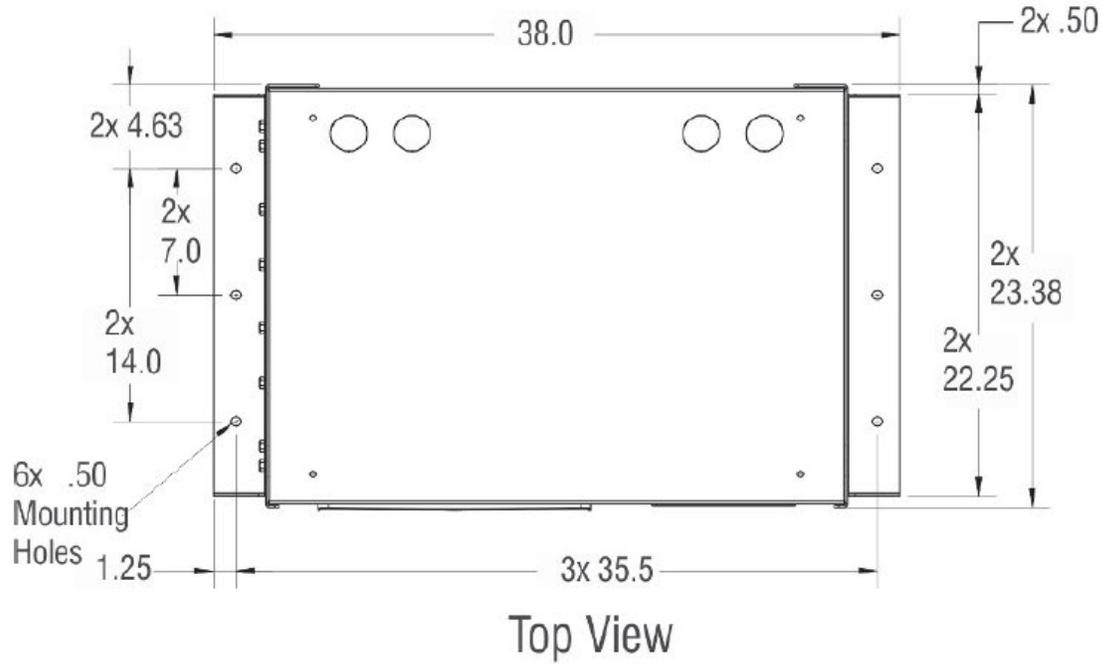
3,200VA – 5,250VA INVERTER



POWER VA RATING	PHASE CONFIGURATION	INPUT/OUTPUT VOLTAGE	NO. OF BATTERIES	MAX OUTPUT BREAKERS
3200W	1P	120V (L-N) 277V (L-N)	8	12
4200W			10	
5200W			12	

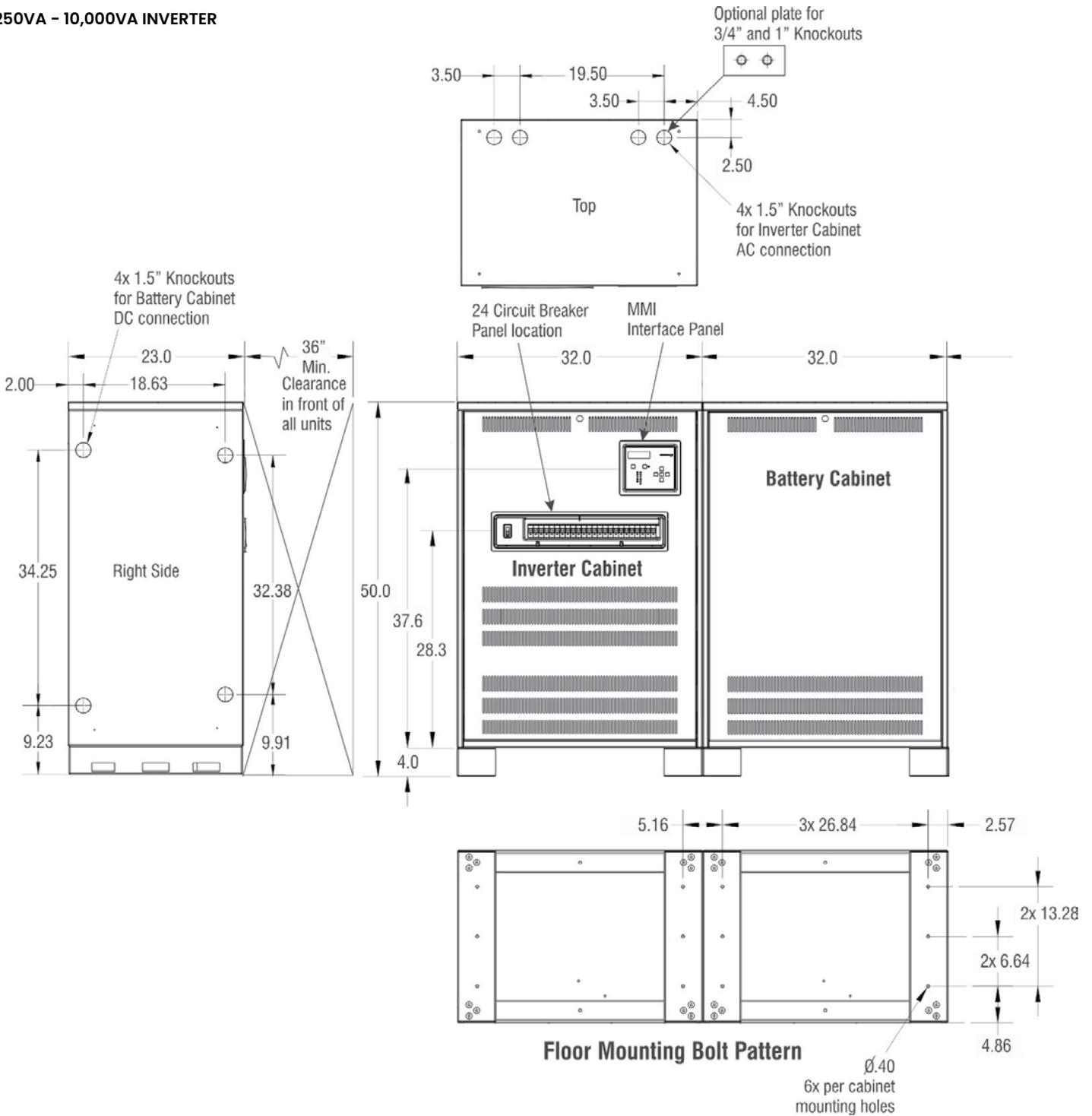
DIMENSIONS

3,200VA - 5,250VA INVERTER WITH SEISMIC BRACKETS



DIMENSIONS

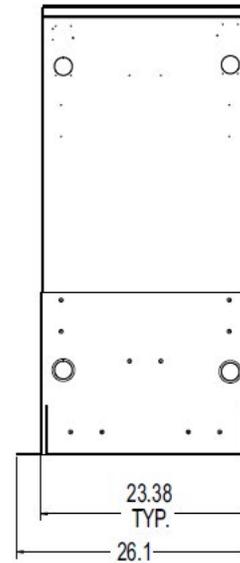
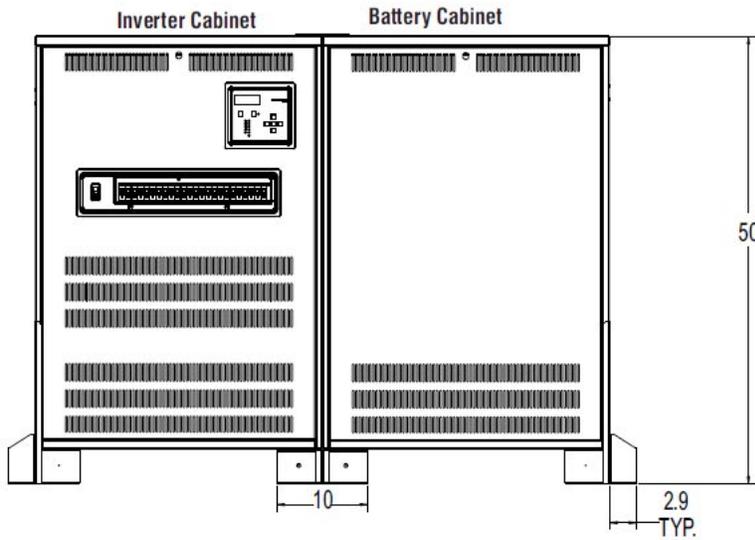
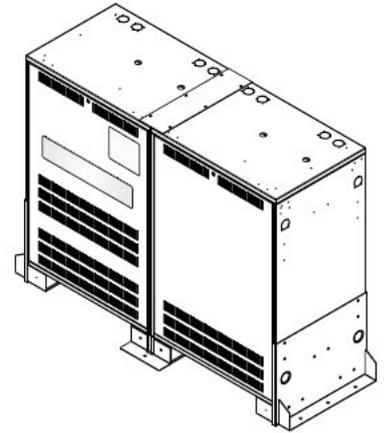
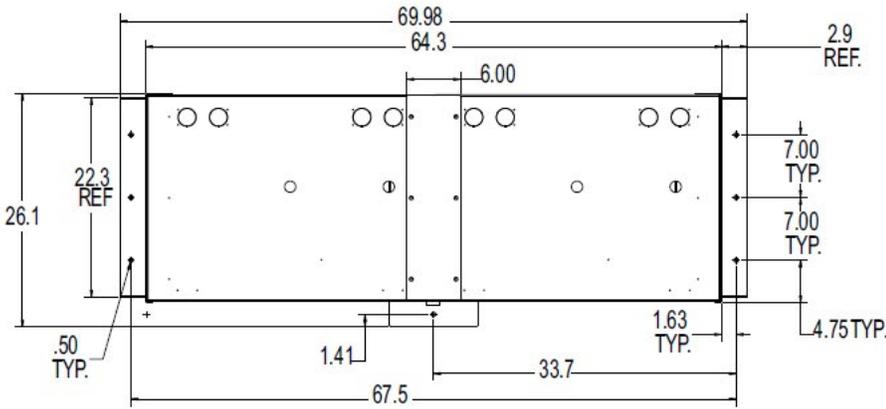
6,250VA – 10,000VA INVERTER



POWER VA RATING	PHASE CONFIGURATION	INPUT/OUTPUT VOLTAGE	NO. OF BATTERIES	MAX OUTPUT BREAKERS
6250W	1P	120V (L-N) / 277V (L-N)	16	24
10000W		277V (L-N)	20	

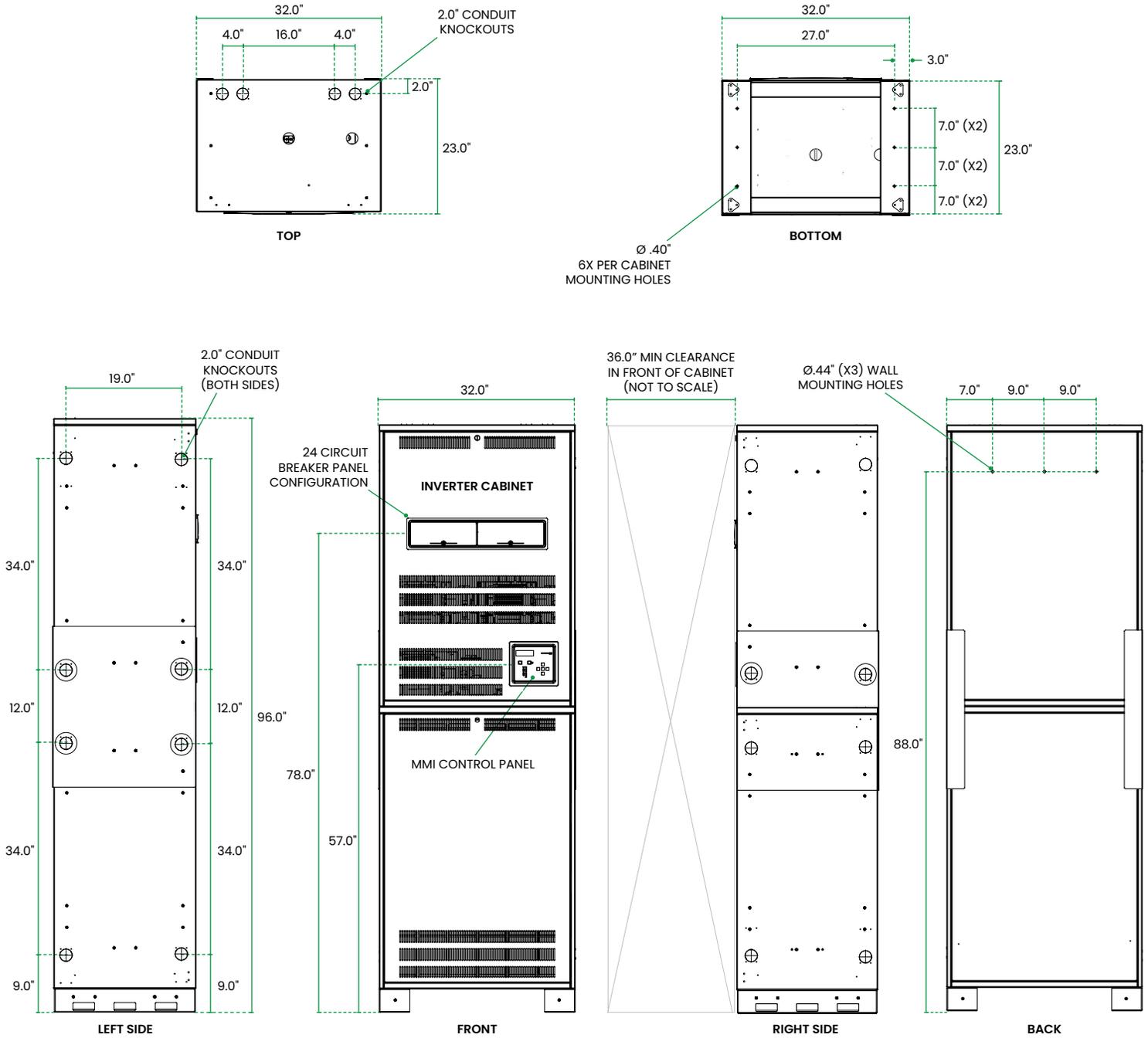
DIMENSIONS

6,250VA - 10,000VA INVERTER WITH SEISMIC BRACKETS



DIMENSIONS

6,250VA – 10,000VA STACKED CONFIGURATION



BMS INTERFACE POINTS LIST

POINT NAME	BACNET OBJECT TYPE	BACNET OBJECT ID	MODBUS REGISTER
Inverter	BI	1	10001
Charger	BI	2	10002
AC Present	BI	3	10003
Ready	BI	4	10004
Switched Load	BI	5	10005
Alarm Summary	BI	6	10006
Bypass	BI	7	10007
Circuit Breaker Tip	BI	8	10008
Startup Fault	BI	9	10009
Charger Fault	BI	10	100010
Inverter Fault	BI	11	100011
Input Voltage (Phase A)	AI	1	30001/30002 (FLOAT)
Input Voltage (Phase B)	AI	2	30003/30004 (FLOAT)
Input Voltage (Phase C)	AI	3	30005/30006 (FLOAT)
Output Voltage (Phase A)	AI	4	30007/30008 (FLOAT)
Output Voltage (Phase B)	AI	5	30009/30010 (FLOAT)
Output Voltage (Phase C)	AI	6	30011/30012 (FLOAT)
Output Current (Phase A)	AI	7	30013/30014 (FLOAT)
Output Current (Phase B)	AI	8	30015/30016 (FLOAT)
Output Current (Phase C)	AI	9	30017/30018 (FLOAT)
Battery Voltage	AI	10	30019/30020 (FLOAT)
Battery Current	AI	11	30021/30022 (FLOAT)
Temperature	AI	12	30023/30024 (FLOAT)
Output VA (Phase A)	AI	13	30101/30102 (UINT32)
Output VA (Phase B)	AI	14	30103/30104 (UINT32)
Output VA (Phase C)	AI	15	30105/30106 (UINT32)
Battery Power	AI	16	30107/30108 (UINT32)
System Runtime (Days)	AI	17	30109/30110 (UINT32)
Inverter Runtime (Minutes)	AI	18	30111/30112 (UINT32)
Inverter Runtime (Seconds)	AI	19	30113/30114 (UINT32)
System Events	AI	20	30115/30116 (UINT32)