EVENLITE
LIVES DEPEND ON US

Project Name:	Approved By:
Catalog No:	Type No:

LITEMINDER HT TWO PHASE

4,200VA - 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 hightemperature battery technology to deliver a dependable life-safety emergency power solution for elevated-temperature environments. Engineered for continuous ambient operation up to 60ºC, 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 25ºC average. Conventional VRLA batteries are designed to tolerate only very limited temperature excursions above 25ºC, with each 5ºC increase reducing battery life by approximately 30%; consequently, a standard VRLA battery operating at 33ºC may see its expected service life reduced to roughly five years. In nonclimate-controlled electrical closets—where temperatures frequently exceed 35ºC—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 4,200VA 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 Maintenece 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 30˚ C
- Brownout protection set for 85% of the nominal line voltage

FEATURES

- Modular inverter allows operation for two phase operation to order
- 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 thru 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
- Five LED indicators provide the status of the Inverter, Charger, AC present, Ready, and Switched Load (if provided with Switched Output Circuit Breakers)
- 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.

LITEMINDER HT TWO PHASE

4,200VA - 10,000VA Central High-Temperature/BABA Inverter System

FEATURES *(CONTINUED)*

- 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
- The Meter Menu allows the user to access the Input and Output Voltages, Output Current, Output VA, Battery Voltage, Battery Current, Battery Power, Temperature, System Days, Inverter minutes and Inverter Events
- The inverter and battery cabinets are constructed from 14 gauge CRS and are powder painted with no visible hardware
- Internally, the inverter has all galvanized or painted steel parts for all modules and shelves to resist corrosion and provide high durability and longevity
- Installer friendly front mounted battery terminals for easier and faster installation
- Three Rate Charger circuit is fully temperature compensated for added reliability

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-10000-2P-HT-ID-OD-S4-TA-Z4-FS

MODEL	VA RATING	CONFIGURATION	BATTERY TYPE	INPUT VOLTAGE	OUTPUT VOLTAGE
LM	**4200** 4200VA **5200** 5200VA **6250** 6250VA **8250** 8250VA **10000** 10000VA	**2P** Two Phase	**HT** High-Temperature	**ID** 120V/120V/240V[1] **IC** 120V/120V/208V **IE** 277V/277V/480V[1]	**OD** 120V/120V/240V[1] **OC** 120V/120V/208V **OE** 277V/277V/480V[1]
LM		**2P**	**HT**		

OUTPUT BREAKER CONFIGURATION[3]	OPTIONS		
C(n) 20A Normally On Output Breaker	**TA** Trip Alarm for All Circuit Breakers	**RA** Remote Annunciator	**EB15** 15 Year Extended Battery Warranty[10]
O(n) 20A Normally Off Output Breaker	**TB** 1 Summary/2 Programmable Terminal Block[5]	**KE** Keyed Lock	**EB20** 20 Year Extended Battery Warranty[11]
S(n) 20A Switched Output Breaker	**MB** Internal Maintenance Bypass Switch[6]	**BTMS** Battery Thermal Management System	**UP** Ship Inverter Less Batteries
(n)= Quantity Required	**BI** BACnet Integration Module	**WM** Wall Mount Kit[7]	**EPO** Emergency Power Off[6]
BB Special Breaker Current Requirement[4]	**LGM** LifeGuard® Monitoring	**FS** On-Site Startup Commissioning	**BL** Output Breaker Locks[12]
	DT 60ms Delayed Transfer	**EW** 5 Year Extended Warranty[8]	**SK** Stacked Cabinet Configuration[13]
	Z4 Seismic Zone 4 Certified	**M(n)** Maintenance Plan[9]	

ORDERING NOTES

1 L-N/L-N/L-L - 3 wire and ground
2 See Output Breaker Quantity Limitations table
3 Two phase inverters require breakers per phase. Must be specified in multiples of 2.
4 Contact factory
5 For form C dry contacts
6 Reduces maximum output breakers by 2. Make before break.
7 Requires On-Site Startup Commissioning [FS]
8 N=years (minimum: 2 / maximum: 5)
9 1 full year with 14 years pro-rated
10 1 full year with 19 years pro-rated
11 1 provided per output circuit breaker specified
12 Not Seismic Certified

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

Type No:

Full Part No:

LITEMINDER HT TWO PHASE

4,200VA - 10,000VA Central High-Temperature/BABA Inverter System

OUTPUT BREAKER QUANTITY LIMITATIONS Any Combination Of Output Types	
4200 - 10000VA	
24X20A	Normally On Without [TA]
12X20A	Normally Off With or Without [TA]
12X20A	Switched With or Without [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-4200	2	32"	50"	23"	445 lbs	270 lbs	570 lbs	? lbs	286	4,200 VA	3,150 VA
LM-5200	2	32"	50"	23"	445 lbs	270 lbs	684 lbs	? lbs	355	5,200 VA	3,900 VA
LM-6250	2	32"	50"	23"	445 lbs	270 lbs	912 lbs	? lbs	426	6,250 VA	4,687 VA
LM-8250	2	32"	50"	23"	495 lbs	270 lbs	1,140 lbs	? lbs	563	8,250 VA	6,187.5 VA
LM-10000	2	32"	50"	23"	495 lbs	270 lbs	1,368 lbs	? lbs	716	10,000 VA	7,500 VA

INPUT CURRENT & BTU CHART

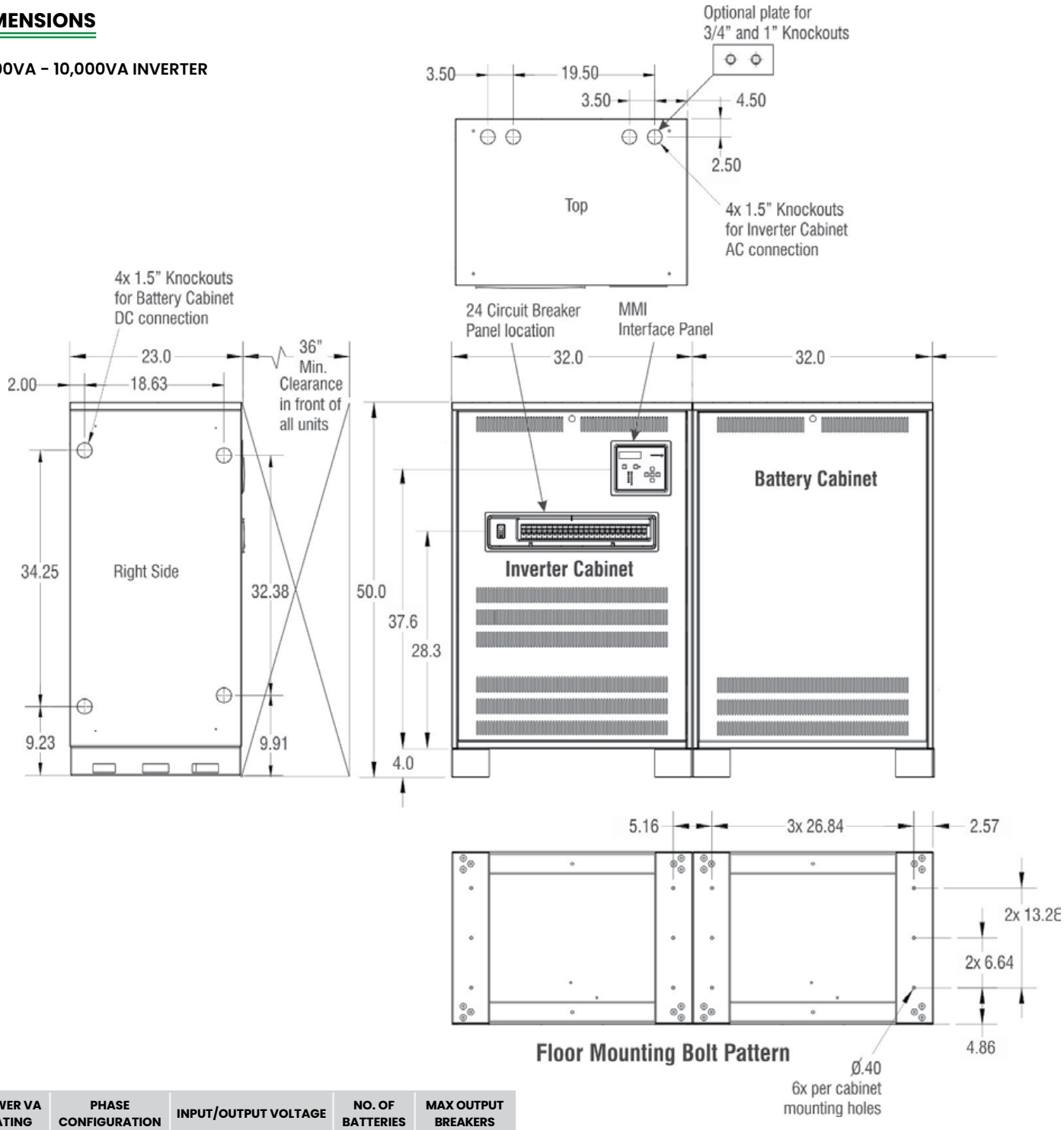
INPUT POWER	INPUT VOLTAGE	INPUT CURRENT	MINIMUM BREAKER REQUIRED	SUGGESTED FEED BREAKER	MAX BTUS HOUR AT FULL LOAD
4200	208	24.0	30.0	30	286
	240	20.8	26.0	30	
	480	10.4	13.0	20	
5200	208	30.0	37.6	40	355
	240	26.0	32.6	40	
	480	13.0	16.3	20	
6250	208	36.1	45.1	50	426
	240	31.3	39.1	40	
	480	15.6	19.5	20	
8250	208	48.1	60.1	70	563
	240	41.7	52.1	60	
	480	26.0	32.6	40	
10000	208	60.1	75.1	80	716
	240	52.1	65.1	70	
	480	26.0	32.6	40	

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

4,200VA - 10,000VA INVERTER

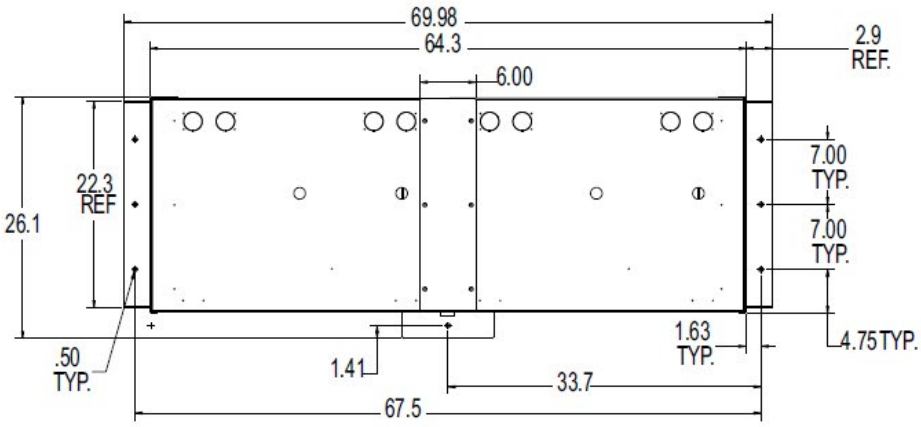


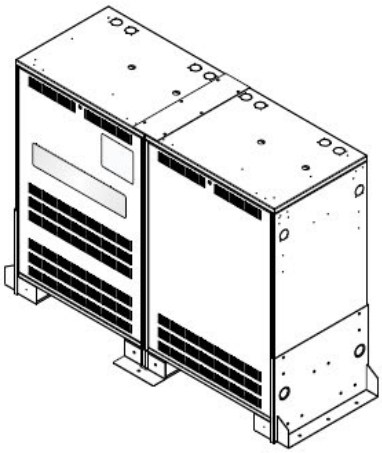
POWER VA RATING	PHASE CONFIGURATION	INPUT/OUTPUT VOLTAGE	NO. OF BATTERIES	MAX OUTPUT BREAKERS
4200W	2P	120V / 120V / 208V 277V / 277V / 480V	8	24
5200W			10	
6250W			12	
8250W			16	
10000W			20	

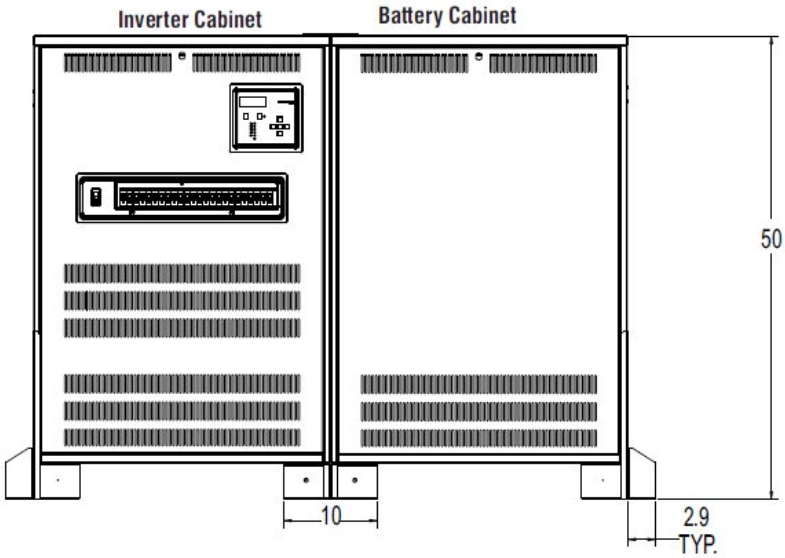
NOTE: Breakers must be a multiple of two to ensure even load distribution.

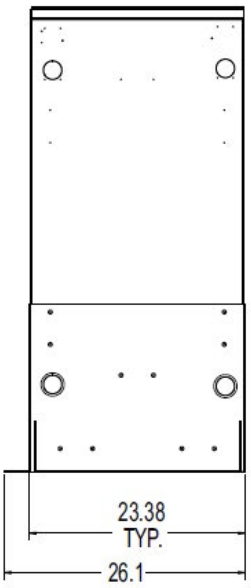
DIMENSIONS

4,200VA - 10,000VA INVERTER WITH SEISMIC BRACKETS



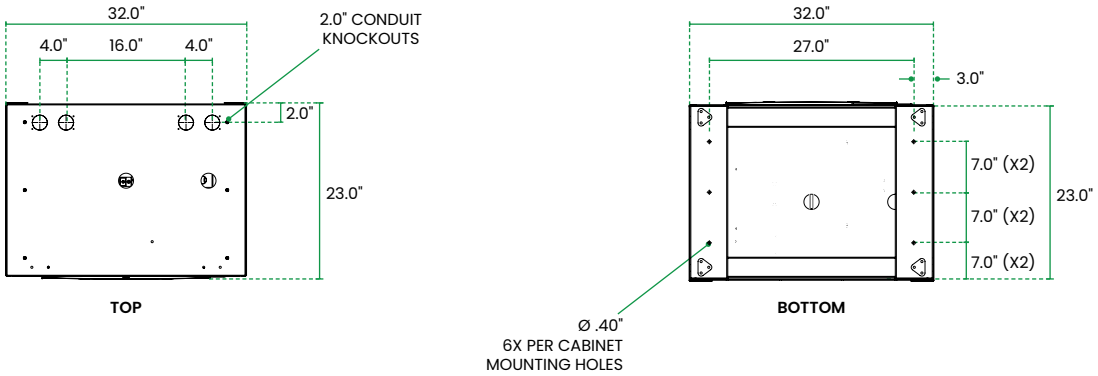


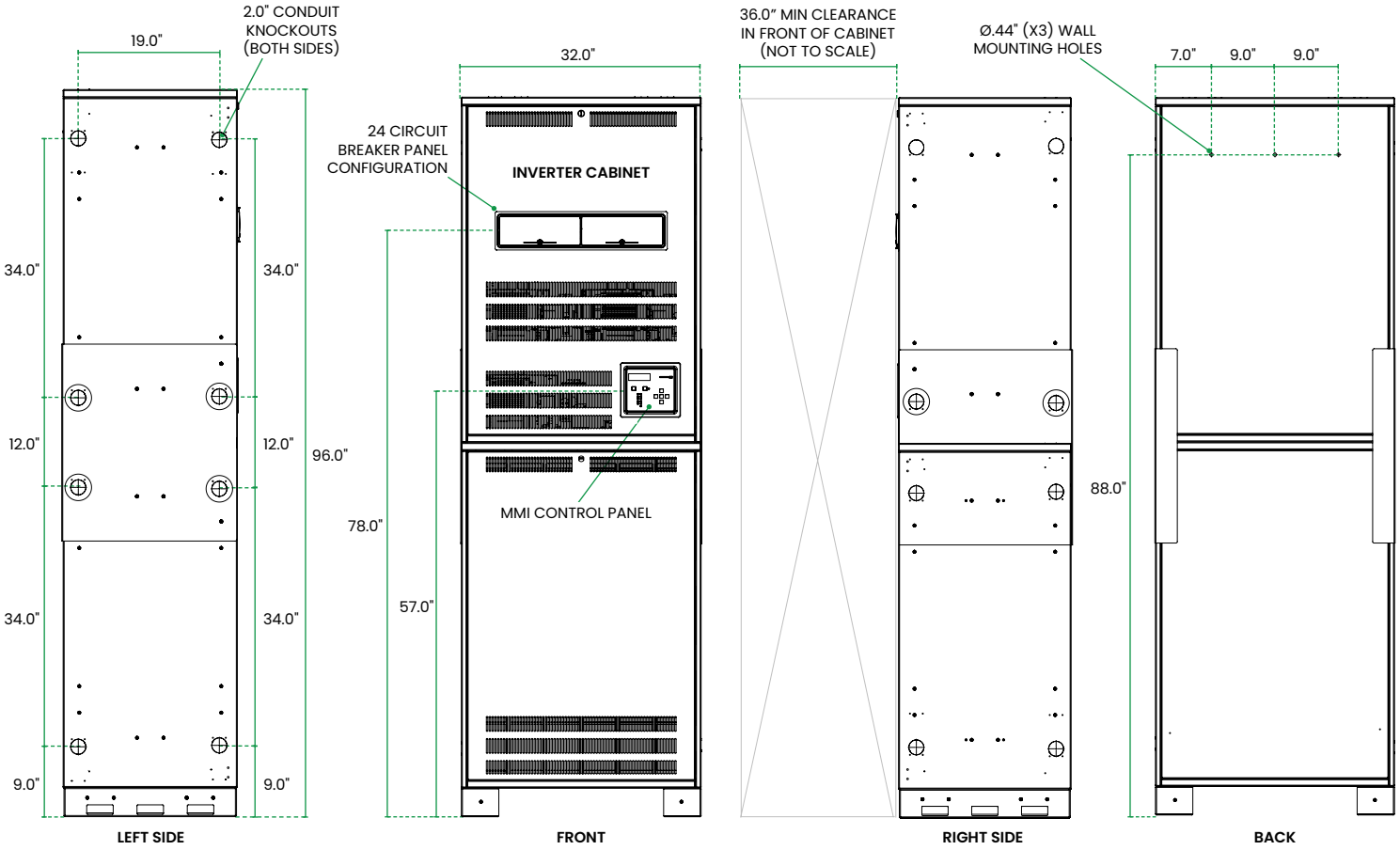




DIMENSIONS

4,200VA - 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	30113/3014 (UINT32)
System Events	AI	20	30115/30116 (UINT32)