**COMBINED FAMILY SPECIFICATION** 



MODULAR INVERTER SYSTEM

E3MAX-1P

**E3MAX-2P** 

E3MAX-SP

**E3MAX-3P** 



13,300-17,000 VA Single Phase Modular AC Inverter

DATE:	COMMENTS:
PROJECT	



# **FEATURES**

- Optional Web-based Monitoring Platform easily view, interact with, download and manage records as needed on any PC or mobile device
- Programmable and password protected user interface
- 98% efficient for minimal BTU losses
- PWM Inverter provides pure sine wave output with less than 3% THD
- Crest factor >4 overload protection for demanding high in-rush loads
- Programmable transfer time select between standard and fast transfer times for load and site compatibility
- UL listed 90 minute run-time
- Compatible with all lighting loads, including HID
- Variable time delay
- Battery recharges in less than 24 hours
- Single phase output
- Start-Up Diagnostics checks for proper installation







# **ORDERING INFORMATION** *E3MAX-13300-1P-IA-OA-C##*

1. SERIES	2. VA RATING	3. PHASE	4. BATTERY TYPE	5. INPUT VOLTAGE	6. OUTPUT VOLTAGE	
E3MAX	-	- 1P	- LC	- IB	- OB	-
	<b>13300</b> 13300 VA Single Phase <b>17000</b> 17000 VA Single Phase	<b>1P</b> Single Phase	LC Lead Calcium	IB 277V	<b>OB</b> 277V	

## 7. OUTPUT BREAKER - NORMALLY ON\* 10. OPTIONS

C\* \* Normally On Breakers<sup>1</sup> BLANK = NO OPTION

MB Maintenance Byp.

MB Maintenance Bypass Switch CB Custom Breaker

**DT** Delayed Transfer

EBW20 Extended Battery Warranty
EEW Extended Electronics Warranty
TA Trip Alarm with Breaker

RA Remote Annunciator (Not Included with TB)

Programmable Terminal Block

TB (Not Included with RA)

BI BMS Integration

**BTMS** Battery Thermal Management System

EO Emergency Power Off
WEB Web Monitoring Connection<sup>3</sup>

LO Breaker Locks KE Keyed Enclosure

#### NOTE

Maximum number of OUTPUT breakers supported depends on sizing and option selection. Contact factory for specific details.

# ORDERING NOTES

- 1. See breaker configuration table on page 3 for maximum breakers.
- $2. \ \ In order to use the web-based monitoring available at \textbf{Isolite.com}, the \text{-WEB option must be selected}.$

ACCESSORIES ON BACK



13,300-17,000 VA Single Phase Modular AC Inverter





# **ACCESSORIES; ORDER SEPARATELY**

- E3MAX-MP# = Maintenance Plan plus number of years (#)
- **FS** = Factory Startup

#### **SPECIFICATIONS**

# **OPTIONAL FEATURES**

- Maintenance bypass switch
- Circuit breakers supervised or unsupervised
- Maintenance contract/plan
- Remote Annunciator
- Factory startup increases electronics warranty to 3 years
- Circuit breaker protected loads (Switched, Normally On, and Normally Off)
- Fault summary alarm and 2 programmable alarms Form C dry contacts

#### **FRONT PANEL**

- Modern 4x20 LCD character display with white LED back-light
- Heads-up diagnostic LEDs include 5 status (AC present, battery charging, inverter power, system ready, switched load energized), fault summary LED, and 5 specific faults (unit in bypass, circuit breaker trip, startup fault, charger fault, inverter fault)
- Dedicated System Test button initiates 30-second test with UL compliant diagnostics
- 5-button keypad for menu navigation
- Sonic alarm with dedicated enable/disable pushbutton with headsup LED. Alarm silence has 24-hour ring-back for alarm reminder
- SD memory card download and store all events, tests, and alarm logs (password protected)
- USB connector access to all event, tests, and alarm logs (password protected)
- Ethernet 10 BASE-T, TCP/IP web serving

#### **BATTERY**

Front access VRLA batteries with 10-Year pro-rated warranty

# **TEMPERATURE RATING**

From 68°F to 86°F
 Battery service life will be negatively impacted at ambient temperatures above 77°F

# **MAINTENANCE PLAN**

Once per year the manufacturer's technician shall visit the site to perform maintenance and software upgrades as needed. Maintenance shall include battery voltage checks, torque setting verification, cleaning, and a thorough visual inspection. All electronics warranties shall be extended to the duration of the Maintenance Plan. Maintenance Plans can be purchased for a duration of 1 year to 5 years.

#### **APPROVALS**

- UL 924
- New York City Approved, Calendar Number 51575
- NFPA101 Life Safety Code
- NFPA70-NEC
- OSHA
- NEMA Type 1 enclosure
- BAA Compliant

#### **BMS INTEGRATION**

- BACNet IP
- BACNet MS/TP
- Modbus TCP
- Modbus RTU

# **WARRANTY**

- Isolite warrants the E3MAX series electronics assembly against defects in material and workmanship for a period of 2 years, or 3 years with factory startup option. Extended Warranty options available.
- Isolite warrants the E3MAX series lead calcium batteries for a 1-year full and 9-year pro-rated limited warranty.
- For further details, refer to General Warranty and Obligations in the Isolite manual or on our website.
- The EEW option extends the electronics warranty to 5 years.
   Batteries are not included in the extended warranty.

### **NOTES**

- Due to power factor calculations, we recommend only loading the E3MAX inverter to 90% of load wattage.
- Max power for any phase (L-N, L-L) is 1/3 of total power capacity.
- For Two Phase, Split Phase, or Three Phase, see E3MAX-2P, E3MAX-SP, or E3MAX-3P.



13,300-17,000 VA Single Phase Modular AC Inverter







			N	IAXIMUM BREAK	ŒRS		MAXIMUM BREAKERS							
Phase	# of Breakers Normally On	# of Breakers Normally On with TA	# of Breaker Normally On with MB		# of Breakers Normally On with TA + MB	# of Breakers Normally On with TA + EO	# of Breakers Normally On with MB + EO	# of Breakers Normally On with TA + MB + EO						
Single-Phase (1P)	36	24	35	35	23	23	34	22						

	WEIGHT & DIMENSIONS								
Phase	Power Rating (kW)	# of Cabinets	Width (in)	Height (in)	Depth (in)	Inverter Cabinet Weight (lbs)	Battery Cabinet Weight (lbs)	Shipping Weight (lbs)	# of Batteries
Single-Phase	13.3 kW	2	53	77	25	790	2336	3161	16
(1P)	17.0 kW	2	53	77	25	790	2820	3645	20

	ELECTRICAL DATA							
	5 5 11 4340	Minimum Feed Breaker	Suggested Feed Breaker	5 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AU D. ()			
Model	Power Rating (kW)	Input Voltage IB	Input Voltage IB	Full Load BTU/Hr	AH Ratings			
E3MAX-13300-1P	13.3 kW	78 A	80 A	907	30720			
E3MAX-17000-1P	17.0 kW	99.7 A	100 A	1159	38400			



13,300-17,000 VA Single Phase Modular AC Inverter







#### **OPTION DEFINITIONS**

# **Battery Thermal Management System (BTMS)**

A more advanced temperature reading configuration that measures temperature at the busbar between every two batteries.

#### **BMS Integration (BI)**

The inverter sends info to a Building Management System via a wired connection.

#### **Breaker Locks (LO)**

Allows breakers to be locked in the on or off position.

### **Custom Breaker (CB)**

Output breakers of unique amperage/voltage.

# **Delayed Transfer (DT)**

This slows down "Fast Transfer" from 2mS to a standard transfer time of 50mS. This option is ideal for movie theaters or other places with soft ambiance lighting to avoid premature deployment of emergency lighting power in a brownout situation.

### **Emergency Power Off (EO)**

A big red button that kills power to everything.

# **Extended Battery Warranty (EBW20)**

Extends the prorated battery warranty schedule to 20 years.

# **Extended Warranty (EW)**

Extended Warranty can be purchased only if the on-site Factory Start-Up has been purchased as well. Extended Warranty increases the electronics warranty from the standard 3 years (with Factory Start-Up) to a full 5 years.

## Factory Start-Up (FS)

On-site Factory Start-Up includes an on-site visit from an Isolite Technician for inverter activation and demonstration. On-site Factory Start-Up increases electronics warranty from 2 to 3 years. Please see page 34 for full warranty details. To purchase and schedule Factory Start-Up, please visit our website and select "inverters" on the main menu and see "Start-Up Form." Fill out the form, and send it to the email address on the form.

Free phone start-up is available as well. For over the phone assistance with your inverter or start-up, please call our Inverter Tech Support at 800-967-5573, and they will be happy to assist you. Note that the phone start-up does not increase the warranty.

#### **Keyed Enclosure (KE)**

Locking cabinet with key for areas where unauthorized tampering is a concern.

#### Maintenance Bypass Switch (MB)

Internal switch to bypass all inverter operations. When activated, input power is transferred directly to the output breakers, allowing inverter servicing.

## Maintenance Plan (M#)

Customer may choose from 1 year (M1) to 5 year (M5) maintenance plans. Once per year an Isolite Technician will visit the site to perform maintenance and software upgrades. The maintenance includes battery voltage checks, torque setting verification, cleaning, and physically ensuring that the inverter is 100% operational. If any issues with the inverter are found, Isolite will fix or replace parts as necessary. All electronics warranty is extended to the duration of the maintenance plan. Note that the battery warranty is not extended and will keep the standard 10 year pro-rated schedule.

#### **Programmable Terminal Block (TB)**

Allows inverter operations to be output to another system such as Lutron, or Crestron. Form C dry contact ensures integration into these systems with ease.

## Remote Annunciator (RA)

An LED indicator and audible alarm which enables the user to monitor the status of the inverter from a remote lo cation where the annunciator is mounted. An annunciator located in a separate office will alert those present that the inverter is in an alarm condition.

#### Seismic Restraints (Z4)

Seismic Restraints are shaker table tested and seismic certified to the latest California Building Code (CBC) 2016. Shake table testing was performed in accordance with International Code Council Evaluation Service Acceptance Criteria 156 (ICC-ES AC156) and is OSHPD approved. For more details, please reference our Seismic Certified Inverters booklet. Locked cabinet (KE) standard when Z4 is chosen.

#### Trip Alarm with Breaker (TA)

Trip Alarm is a feature of Isolite Inverters that notifies the instrument panel if any breaker output is tripped. This will broadcast an alarm to the remote (\*requires additional Remote Annunciator (RA) purchase).

#### Wall Mounting Bracket (WB)

Mounts inverter to the wall (E3MAC-1000 only).

#### Web Monitoring Connection (WEB)

Access critical data from the inverter through the internet.





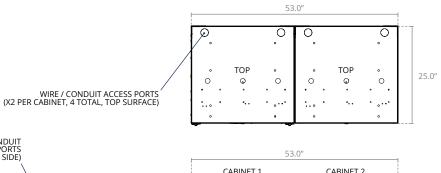


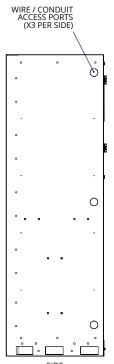


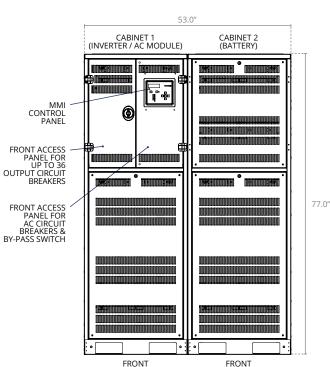


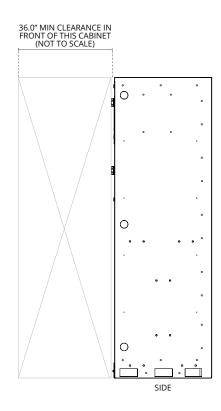
#### **DIAGRAMS**

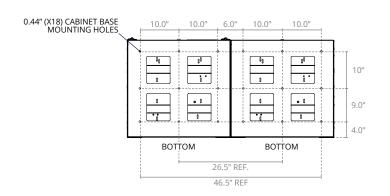
# **2 CABINET CONFIGURATION**

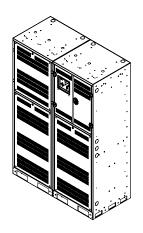
















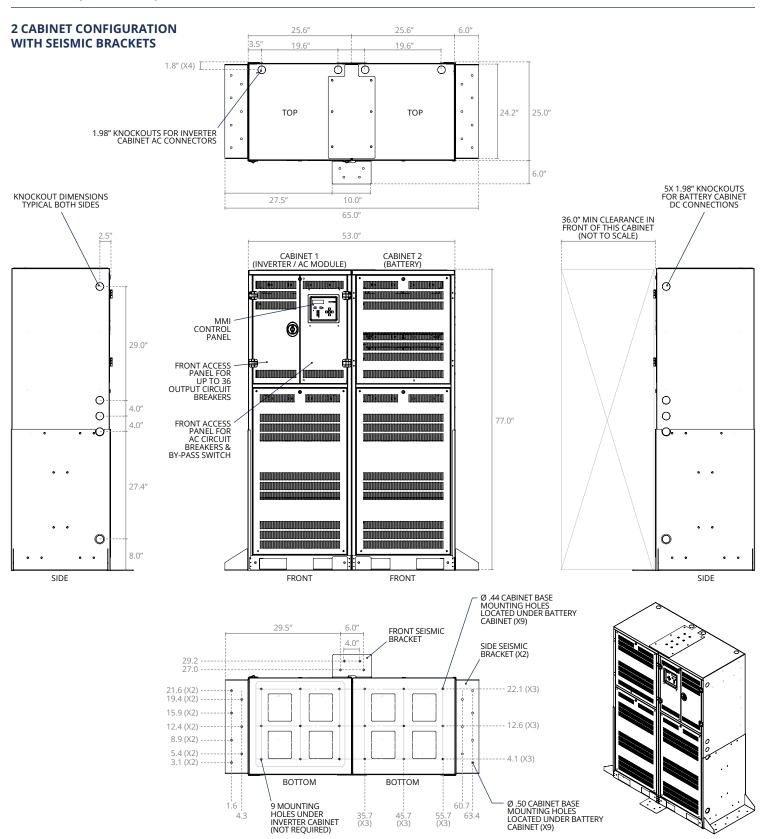




13,300-17,000 VA Single Phase Modular AC Inverter



# **DIAGRAMS (CONTINUED)**







13,300-17,000 VA Single Phase Modular AC Inverter





# **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)	Al	1	30001/30002 (FLOAT)
Input Voltage (Phase B)	Al	2	30003/30004 (FLOAT)
Input Voltage (Phase C)	Al	3	30005/30006 (FLOAT)
Output Voltage (Phase A)	Al	4	30007/30008 (FLOAT)
Output Voltage (Phase B)	Al	5	30009/30010 (FLOAT)
Output Voltage (Phase C)	Al	6	30011/30012 (FLOAT)
Output Current (Phase A)	Al	7	30013/30014 (FLOAT)
Output Current (Phase B)	Al	8	30015/30016 (FLOAT)
Output Current (Phase C)	Al	9	30017/30018 (FLOAT)
Battery Voltage	Al	10	30019/30020 (FLOAT)
Battery Current	Al	11	30021/30022 (FLOAT)
Temperature	Al	12	30023/30024 (FLOAT)
Output VA (Phase A)	Al	13	30101/30102 (UINT32)
Output VA (Phase B)	Al	14	30103/30104 (UINT32)
Output VA (Phase C)	Al	15	30105/30106 (UINT32)
Battery Power	Al	16	30107/30108 (UINT32)
System Runtime (Days)	Al	17	30109/30110 (UINT32)
Inverter Runtime (Minutes)	Al	18	30111/30112 (UINT32)
nverter Runtime (Seconds)	Al	19	30113/3014 (UINT32)
System Events	Al	20	30115/30116 (UINT32)



# E3MAX-2P

8,500-13,300 VA Two Phase Modular AC Inverter

DATE:	COMMENTS:
PROJECT	



# **FEATURES**

- Optional Web-based Monitoring Platform easily view, interact with, download and manage records as needed on any PC or mobile device
- Programmable and password protected user interface
- 98% efficient for minimal BTU losses
- PWM Inverter provides pure sine wave output with less than 3% THD
- Crest factor >4 overload protection for demanding high in-rush loads
- Programmable transfer time select between standard and fast transfer times for load and site compatibility
- UL listed 90 minute run-time
- Compatible with all lighting loads, including HID
- Variable time delay
- Battery recharges in less than 24 hours
- Two Phase output
- Start-Up Diagnostics checks for proper installation







# ORDERING INFORMATION E3MAX-8500-2P-LC-IA-OA-C##

1. SERIES	2. VA RATING		3. PHASE	4. B <i>A</i>	ATTERY TYPE	5. INP	UT VOLTAGE	6. OU	JTPUT VOLTAGE
E3MAX	-		- 2P	-	LC	-	-		-
	8500 8500 VA Two 10500 10500 VA Two 13300 13300 VA Two	o Phase	2P Two Phase	LC L	ead Calcium.		0V/120V/208V 7V/277V/480V	-	120V/120V/208V 277V/277V/480V
7. OUTPUT BREAKER - NOR	MALLY ON*	10. OPTION	IS						
C* * Normally On Breakers <sup>1</sup>		CB Cus DT Del EBW20 Ext EEW Ext TA Trip RA Rer TB Pro	O OPTION intenance Bypass Sistom Breaker ayed Transfer ended Battery Warr ended Electronics V o Alarm with Breake note Annunciator (N grammable Termin t Included with RA)	anty /arranty r lot Inclu	ided with TB)	BTMS EO WEB LO	BMS Integration Battery Thermal Emergency Powe Web Monitoring Breaker Locks Keyed Enclosure	er Off Connec	-

#### NOTE

Maximum number of OUTPUT breakers supported depends on sizing and option selection. Contact factory for specific details.

#### ORDERING NOTES

- 1. See breaker configuration table on page 3 for maximum breakers.
- $2. \ \ In order to use the web-based monitoring available at \textbf{Isolite.com}, the \text{-WEB option must} be selected.$

ACCESSORIES ON BACK



8,500-13,300 VA Two Phase Modular AC Inverter







# **ACCESSORIES; ORDER SEPARATELY**

- E3MAX-MP# = Maintenance Plan plus number of years (#)
- **FS** = Factory Startup

#### **SPECIFICATIONS**

#### **OPTIONAL FEATURES**

- Maintenance bypass switch
- Circuit breakers supervised or unsupervised
- Maintenance contract/plan
- Remote Annunciator
- Factory startup increases electronics warranty to 3 years
- Circuit breaker protected loads (Switched, Normally On, and
- Fault summary alarm and 2 programmable alarms Form C dry contacts

#### **FRONT PANEL**

- Modern 4x20 LCD character display with white LED back-light
- Heads-up diagnostic LEDs include 5 status (AC present, battery charging, inverter power, system ready, switched load energized), fault summary LED, and 5 specific faults (unit in bypass, circuit breaker trip, startup fault, charger fault, inverter fault)
- Dedicated System Test button initiates 30-second test with UL compliant diagnostics
- 5-button keypad for menu navigation
- Sonic alarm with dedicated enable/disable pushbutton with headsup LED. Alarm silence has 24-hour ring-back for alarm reminder
- SD memory card download and store all events, tests, and alarm logs (password protected)
- USB connector access to all event, tests, and alarm logs (password protected)
- Ethernet 10 BASE-T, TCP/IP web serving

#### **BATTERY**

Front access VRLA batteries with 10-Year pro-rated warranty

# **TEMPERATURE RATING**

From 68°F to 86°F Battery service life will be negatively impacted at ambient temperatures above 77°F

# **MAINTENANCE PLAN**

Once per year the manufacturer's technician shall visit the site to perform maintenance and software upgrades as needed. Maintenance shall include battery voltage checks, torque setting verification, cleaning, and a thorough visual inspection. All electronics warranties shall be extended to the duration of the Maintenance Plan. Maintenance Plans can be purchased for a duration of 1 year to 5 years.

#### **APPROVALS**

- UL 924
- New York City Approved, Calendar Number 51575
- NFPA101 Life Safety Code
- NFPA70-NEC
- **OSHA**
- NEMA Type 1 enclosure
- **BAA Compliant**

#### **BMS INTEGRATION**

- **BACNet IP**
- **BACNet MS/TP**
- Modbus TCP
- Modbus RTU

# **WARRANTY**

- Isolite warrants the E3MAX series electronics assembly against defects in material and workmanship for a period of 2 years, or 3 years with factory startup option. Extended Warranty options available.
- Isolite warrants the E3MAX series lead calcium batteries for a 1-year full and 9-year pro-rated limited warranty.
- For further details, refer to General Warranty and Obligations in the Isolite manual or on our website.
- The EEW option extends the electronics warranty to 5 years. Batteries are not included in the extended warranty.

### **NOTES**

- Due to power factor calculations, we recommend only loading the E3MAX inverter to 90% of load wattage.
- Max power for any phase (L-N, L-L) is 1/3 of total power capacity.
- For Single Phase, Split Phase, or Three Phase, see E3MAX-1P, E3MAX-SP, or E3MAX-3P.



# E3MAX-2P

8,500-13,300 VA Two Phase Modular AC Inverter





	MAXIMUM BREAKERS							
Phase # of Breakers # of Breaker # of Breaker Normally On Normally On with TA Normally On with MB					# of Breakers Normally On with TA + MB	# of Breakers Normally On with TA + EO		# of Breakers Normally On with TA + MB + EO
Two-Phase (2P)								20

	WEIGHT & DIMENSIONS								
Phase	Power Rating (kW)	# of Cabinets	Width (in)	Height (in)	Depth (in)	Inverter Cabinet Weight (lbs)	Battery Cabinet Weight (lbs)	Shipping Weight (lbs)	# of Batteries
	8.5 kW	2	53	77	25	630	1600	2265	16
Two-Phase (2P)	10.5 kW	2	53	77	25	750	1900	2685	20
(21)	13.3 kW	2	53	77	25	750	2336	3086	16

	ELECTRICAL DATA						
	2 2 3 4 4 1 1		eed Breaker	Suggested F	eed Breaker	- "	
Model	Power Rating (kW)	Input Voltage IC	Input Voltage IE	Input Voltage IC	Input Voltage IE	Full Load BTU/Hr	AH Ratings
E3MAX-8500-2P	8.5 kW	66.4 A	28.8 A	70 A	30 A	580	19200
E3MAX-10500-2P	10.5 kW	82 A	35.5 A	90 A	40 A	716	24000
E3MAX-13300-2P	13.3 kW	103.9 A	45 A	110 A	50 A	907	30720



# E3MAX-2P

8,500-13,300 VA Two Phase Modular AC Inverter







#### **OPTION DEFINITIONS**

# **Battery Thermal Management System (BTMS)**

A more advanced temperature reading configuration that measures temperature at the busbar between every two batteries.

#### **BMS Integration (BI)**

The inverter sends info to a Building Management System via a wired connection.

#### **Breaker Locks (LO)**

Allows breakers to be locked in the on or off position.

### **Custom Breaker (CB)**

Output breakers of unique amperage/voltage.

# **Delayed Transfer (DT)**

This slows down "Fast Transfer" from 2mS to a standard transfer time of 50mS. This option is ideal for movie theaters or other places with soft ambiance lighting to avoid premature deployment of emergency lighting power in a brownout situation.

### **Emergency Power Off (EO)**

A big red button that kills power to everything.

# **Extended Battery Warranty (EBW20)**

Extends the prorated battery warranty schedule to 20 years.

#### **Extended Warranty (EW)**

Extended Warranty can be purchased only if the on-site Factory Start-Up has been purchased as well. Extended Warranty increases the electronics warranty from the standard 3 years (with Factory Start-Up) to a full 5 years.

#### Factory Start-Up (FS)

On-site Factory Start-Up includes an on-site visit from an Isolite Technician for inverter activation and demonstration. On-site Factory Start-Up increases electronics warranty from 2 to 3 years. Please see page 34 for full warranty details. To purchase and schedule Factory Start-Up, please visit our website and select "inverters" on the main menu and see "Start-Up Form." Fill out the form, and send it to the email address on the form.

Free phone start-up is available as well. For over the phone assistance with your inverter or start-up, please call our Inverter Tech Support at 800-967-5573, and they will be happy to assist you. Note that the phone start-up does not increase the warranty.

#### **Keyed Enclosure (KE)**

Locking cabinet with key for areas where unauthorized tampering is a concern.

#### Maintenance Bypass Switch (MB)

Internal switch to bypass all inverter operations. When activated, input power is transferred directly to the output breakers, allowing inverter servicing.

## Maintenance Plan (M#)

Customer may choose from 1 year (M1) to 5 year (M5) maintenance plans. Once per year an Isolite Technician will visit the site to perform maintenance and software upgrades. The maintenance includes battery voltage checks, torque setting verification, cleaning, and physically ensuring that the inverter is 100% operational. If any issues with the inverter are found, Isolite will fix or replace parts as necessary. All electronics warranty is extended to the duration of the maintenance plan. Note that the battery warranty is not extended and will keep the standard 10 year pro-rated schedule.

#### **Programmable Terminal Block (TB)**

Allows inverter operations to be output to another system such as Lutron, or Crestron. Form C dry contact ensures integration into these systems with ease.

## Remote Annunciator (RA)

An LED indicator and audible alarm which enables the user to monitor the status of the inverter from a remote lo cation where the annunciator is mounted. An annunciator located in a separate office will alert those present that the inverter is in an alarm condition.

#### Seismic Restraints (Z4)

Seismic Restraints are shaker table tested and seismic certified to the latest California Building Code (CBC) 2016. Shake table testing was performed in accordance with International Code Council Evaluation Service Acceptance Criteria 156 (ICC-ES AC156) and is OSHPD approved. For more details, please reference our Seismic Certified Inverters booklet. Locked cabinet (KE) standard when Z4 is chosen.

#### Trip Alarm with Breaker (TA)

Trip Alarm is a feature of Isolite Inverters that notifies the instrument panel if any breaker output is tripped. This will broadcast an alarm to the remote (\*requires additional Remote Annunciator (RA) purchase).

#### Wall Mounting Bracket (WB)

Mounts inverter to the wall (E3MAC-1000 only).

#### Web Monitoring Connection (WEB)

Access critical data from the inverter through the internet.





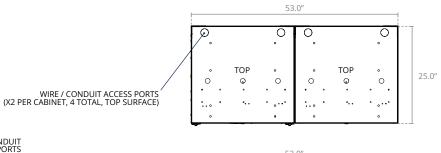


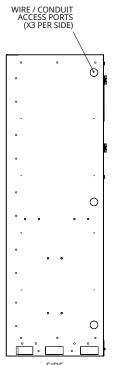


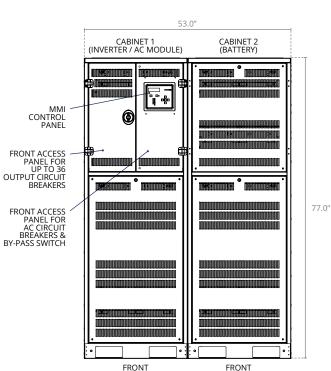


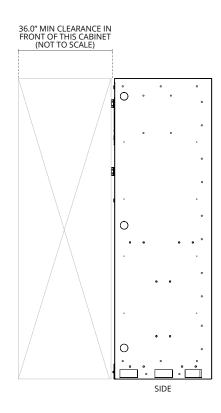
#### **DIAGRAMS**

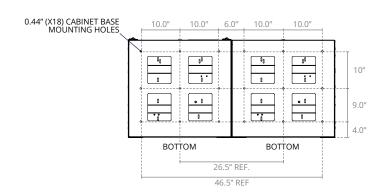
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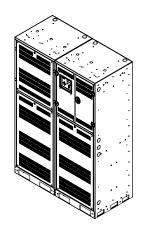


















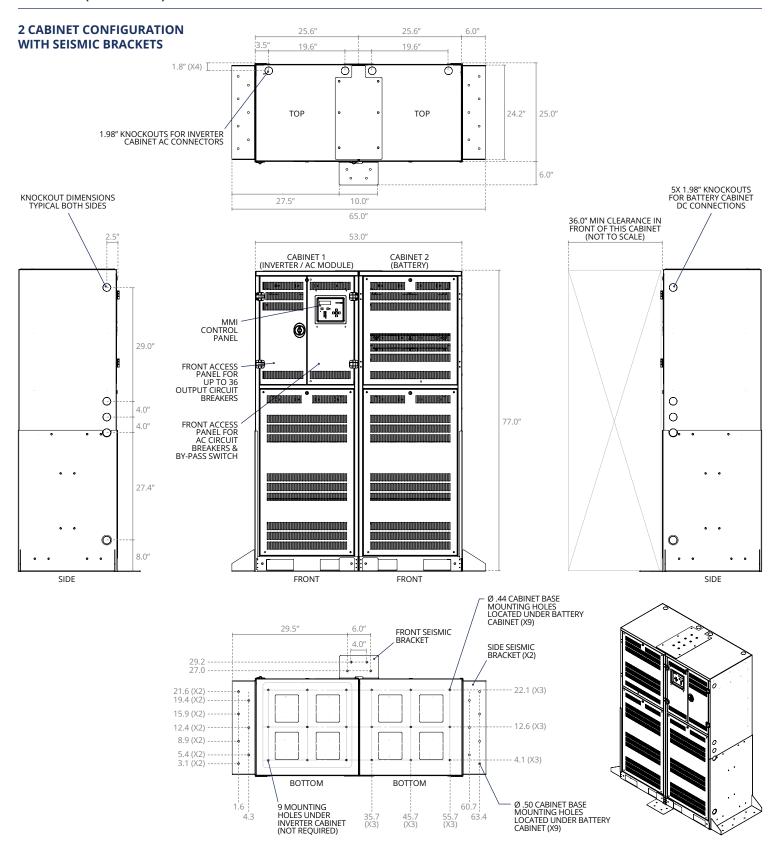


8,500-13,300 VA Two Phase Modular AC Inverter





# **DIAGRAMS (CONTINUED)**









8,500-13,300 VA Two Phase Modular AC Inverter



# **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)	Al	1	30001/30002 (FLOAT)
Input Voltage (Phase B)	Al	2	30003/30004 (FLOAT)
Input Voltage (Phase C)	Al	3	30005/30006 (FLOAT)
Output Voltage (Phase A)	Al	4	30007/30008 (FLOAT)
Output Voltage (Phase B)	Al	5	30009/30010 (FLOAT)
Output Voltage (Phase C)	Al	6	30011/30012 (FLOAT)
Output Current (Phase A)	Al	7	30013/30014 (FLOAT)
Output Current (Phase B)	Al	8	30015/30016 (FLOAT)
Output Current (Phase C)	Al	9	30017/30018 (FLOAT)
Battery Voltage	Al	10	30019/30020 (FLOAT)
Battery Current	Al	11	30021/30022 (FLOAT)
Temperature	Al	12	30023/30024 (FLOAT)
Output VA (Phase A)	Al	13	30101/30102 (UINT32)
Output VA (Phase B)	Al	14	30103/30104 (UINT32)
Output VA (Phase C)	Al	15	30105/30106 (UINT32)
Battery Power	Al	16	30107/30108 (UINT32)
System Runtime (Days)	Al	17	30109/30110 (UINT32)
nverter Runtime (Minutes)	Al	18	30111/30112 (UINT32)
nverter Runtime (Seconds)	Al	19	30113/3014 (UINT32)
System Events	Al	20	30115/30116 (UINT32)



8,500-13,300 VA Split Phase Modular AC Inverter

DATE:	COMMENTS:
PROJECT	



# **FEATURES**

- Optional Web-based Monitoring Platform easily view, interact with, download and manage records as needed on any PC or mobile device
- Programmable and password protected user interface
- 98% efficient for minimal BTU losses
- PWM Inverter provides pure sine wave output with less than 3% THD
- Crest factor >4 overload protection for demanding high in-rush loads
- Programmable transfer time select between standard and fast transfer times for load and site compatibility
- UL listed 90 minute run-time
- Compatible with all lighting loads, including HID
- Variable time delay
- Battery recharges in less than 24 hours
- Split Phase output
- Start-Up Diagnostics checks for proper installation







# ORDERING INFORMATION E3MAX-8500-SP-LC-ID-OD-C##

1. SERIES	2. VA RATING	3. PHASE	4. BATTERY TYPE	5. INPUT VOLTAGE	6. OUTPUT VOLTAGE
E3MAX	-	- SP	- LC	- ID	- OD -
	8500 8500 VA Two Phase 10500 10500 VA Two Phase 13300 13300 VA Two Phase	SP Split Phase	<b>LC</b> Lead Calcium	ID 120V/120V/240V	<b>OD</b> 120V/120V/240V

7. OUTPUT BREAKER - NORMALLY ON\* 10. OPTIONS

C\* \* Normally On Breakers1

**BLANK = NO OPTION** 

Maintenance Bypass Switch MB

CB Custom Breaker DT

**Delayed Transfer** EBW20 Extended Battery Warranty

**EEW Extended Electronics Warranty** TA Trip Alarm with Breaker

RA Remote Annunciator (Not Included with TB)

Programmable Terminal Block TB

(Not Included with RA)

**BMS** Integration

**BTMS** Battery Thermal Management System

EO **Emergency Power Off** WEB Web Monitoring Connection<sup>2</sup>

LO **Breaker Locks** ΚE **Keyed Enclosure** 

#### NOTE

Maximum number of OUTPUT breakers supported depends on sizing and option selection. Contact factory for specific details.

- 1. See breaker configuration table on page 3 for maximum breakers.
- 2. In order to use the web-based monitoring available at Isolite.com, the -WEB option must be selected.

**ACCESSORIES ON BACK** 



8,500-13,300 VA Split Phase Modular AC Inverter





# **ACCESSORIES; ORDER SEPARATELY**

- E3MAX-MP# = Maintenance Plan plus number of years (#)
- **FS** = Factory Startup

#### **SPECIFICATIONS**

#### **OPTIONAL FEATURES**

- Maintenance bypass switch
- Circuit breakers supervised or unsupervised
- Maintenance contract/plan
- Remote Annunciator
- Factory startup increases electronics warranty to 3 years
- Circuit breaker protected loads (Switched, Normally On, and Normally Off)
- Fault summary alarm and 2 programmable alarms Form C dry contacts

#### **FRONT PANEL**

- Modern 4x20 LCD character display with white LED back-light
- Heads-up diagnostic LEDs include 5 status (AC present, battery charging, inverter power, system ready, switched load energized), fault summary LED, and 5 specific faults (unit in bypass, circuit breaker trip, startup fault, charger fault, inverter fault)
- Dedicated System Test button initiates 30-second test with UL compliant diagnostics
- 5-button keypad for menu navigation
- Sonic alarm with dedicated enable/disable pushbutton with headsup LED. Alarm silence has 24-hour ring-back for alarm reminder
- SD memory card download and store all events, tests, and alarm logs (password protected)
- USB connector access to all event, tests, and alarm logs (password protected)
- Ethernet 10 BASE-T, TCP/IP web serving

#### **BATTERY**

Front access VRLA batteries with 10-Year pro-rated warranty

# **TEMPERATURE RATING**

From 68°F to 86°F
 Battery service life will be negatively impacted at ambient temperatures above 77°F

# **MAINTENANCE PLAN**

 Once per year the manufacturer's technician shall visit the site to perform maintenance and software upgrades as needed.
 Maintenance shall include battery voltage checks, torque setting verification, cleaning, and a thorough visual inspection. All electronics warranties shall be extended to the duration of the Maintenance Plan. Maintenance Plans can be purchased for a duration of 1 year to 5 years.

### **APPROVALS**

- UL 924
- New York City Approved, Calendar Number 51575
- NFPA101 Life Safety Code
- NFPA70-NEC
- OSHA
- NEMA Type 1 enclosure
- BAA Compliant

#### **BMS INTEGRATION**

- BACNet IP
- BACNet MS/TP
- Modbus TCP
- Modbus RTU

# **WARRANTY**

- Isolite warrants the E3MAX series electronics assembly against defects in material and workmanship for a period of 2 years, or 3 years with factory startup option. Extended Warranty options available.
- Isolite warrants the E3MAX series lead calcium batteries for a 1-year full and 9-year pro-rated limited warranty.
- For further details, refer to General Warranty and Obligations in the Isolite manual or on our website.
- The EEW option extends the electronics warranty to 5 years.
   Batteries are not included in the extended warranty.

### **NOTES**

- Due to power factor calculations, we recommend only loading the E3MAX inverter to 90% of load wattage.
- Max power for any phase (L-N, L-L) is 1/3 of total power capacity.
- For Single Phase, Two Phase, or Three Phase, see E3MAX-1P, E3MAX-2P, or E3MAX-3P.



8,500-13,300 VA Split Phase Modular AC Inverter





			N	IAXIMUM BREAK	ŒRS			
Phase	# of Breakers # of Breakers # of Breakers # of Breaker # of Breaker Normally On with TA + MB On with TA + EO On with MB + EO On with TA + On with TA						# of Breakers Normally On with TA + MB + EO	
Split-Phase (SP)	36	24	34	34	22	22	32	20

	WEIGHT & DIMENSIONS								
Phase	Power Rating (kW)	# of Cabinets	Width (in)	Height (in)	Depth (in)	Inverter Cabinet Weight (lbs)	Battery Cabinet Weight (lbs)	Shipping Weight (lbs)	# of Batteries
	8.5 kW	2	53	77	25	630	1600	2265	16
Split-Phase (SP)	10.5 kW	2	53	77	25	750	1900	2685	20
(517)	13.3 kW	2	53	77	25	750	2336	3086	16

	ELECTRICAL DATA							
	5 5 .: 430	Minimum Feed Breaker	Suggested Feed Breaker	5 11 1071111				
Model	Power Rating (kW)	Input Voltage ID	Input Voltage IC	Full Load BTU/Hr	AH Ratings			
E3MAX-8500-SP	8.5 kW	57.6 A	60 A	580	19200			
E3MAX-10500-SP	10.5 kW	71.1 A	80 A	716	24000			
E3MAX-13300-SP	13.3 kW	90.1 A	100 A	907	30720			



8,500-13,300 VA Split Phase Modular AC Inverter







#### **OPTION DEFINITIONS**

# **Battery Thermal Management System (BTMS)**

A more advanced temperature reading configuration that measures temperature at the busbar between every two batteries.

#### **BMS Integration (BI)**

The inverter sends info to a Building Management System via a wired connection.

#### **Breaker Locks (LO)**

Allows breakers to be locked in the on or off position.

#### **Custom Breaker (CB)**

Output breakers of unique amperage/voltage.

# **Delayed Transfer (DT)**

This slows down "Fast Transfer" from 2mS to a standard transfer time of 50mS. This option is ideal for movie theaters or other places with soft ambiance lighting to avoid premature deployment of emergency lighting power in a brownout situation.

### **Emergency Power Off (EO)**

A big red button that kills power to everything.

# **Extended Battery Warranty (EBW20)**

Extends the prorated battery warranty schedule to 20 years.

#### **Extended Warranty (EW)**

Extended Warranty can be purchased only if the on-site Factory Start-Up has been purchased as well. Extended Warranty increases the electronics warranty from the standard 3 years (with Factory Start-Up) to a full 5 years.

#### Factory Start-Up (FS)

On-site Factory Start-Up includes an on-site visit from an Isolite Technician for inverter activation and demonstration. On-site Factory Start-Up increases electronics warranty from 2 to 3 years. Please see page 34 for full warranty details. To purchase and schedule Factory Start-Up, please visit our website and select "inverters" on the main menu and see "Start-Up Form." Fill out the form, and send it to the email address on the form.

Free phone start-up is available as well. For over the phone assistance with your inverter or start-up, please call our Inverter Tech Support at 800-967-5573, and they will be happy to assist you. Note that the phone start-up does not increase the warranty.

#### **Keyed Enclosure (KE)**

Locking cabinet with key for areas where unauthorized tampering is a concern.

#### Maintenance Bypass Switch (MB)

Internal switch to bypass all inverter operations. When activated, input power is transferred directly to the output breakers, allowing inverter servicing.

## Maintenance Plan (M#)

Customer may choose from 1 year (M1) to 5 year (M5) maintenance plans. Once per year an Isolite Technician will visit the site to perform maintenance and software upgrades. The maintenance includes battery voltage checks, torque setting verification, cleaning, and physically ensuring that the inverter is 100% operational. If any issues with the inverter are found, Isolite will fix or replace parts as necessary. All electronics warranty is extended to the duration of the maintenance plan. Note that the battery warranty is not extended and will keep the standard 10 year pro-rated schedule.

#### **Programmable Terminal Block (TB)**

Allows inverter operations to be output to another system such as Lutron, or Crestron. Form C dry contact ensures integration into these systems with ease.

## Remote Annunciator (RA)

An LED indicator and audible alarm which enables the user to monitor the status of the inverter from a remote lo cation where the annunciator is mounted. An annunciator located in a separate office will alert those present that the inverter is in an alarm condition.

#### Seismic Restraints (Z4)

Seismic Restraints are shaker table tested and seismic certified to the latest California Building Code (CBC) 2016. Shake table testing was performed in accordance with International Code Council Evaluation Service Acceptance Criteria 156 (ICC-ES AC156) and is OSHPD approved. For more details, please reference our Seismic Certified Inverters booklet. Locked cabinet (KE) standard when Z4 is chosen.

#### Trip Alarm with Breaker (TA)

Trip Alarm is a feature of Isolite Inverters that notifies the instrument panel if any breaker output is tripped. This will broadcast an alarm to the remote (\*requires additional Remote Annunciator (RA) purchase).

#### Wall Mounting Bracket (WB)

Mounts inverter to the wall (E3MAC-1000 only).

#### Web Monitoring Connection (WEB)

Access critical data from the inverter through the internet.





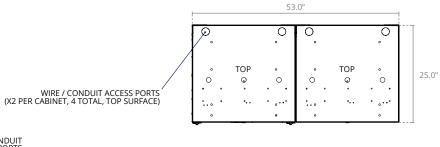


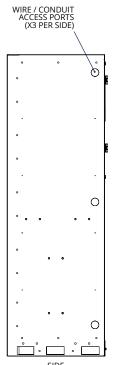


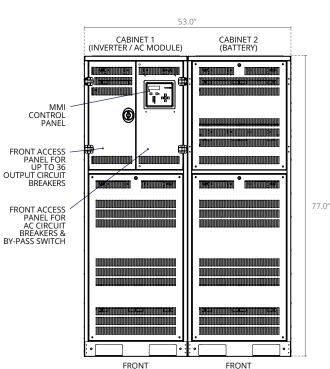


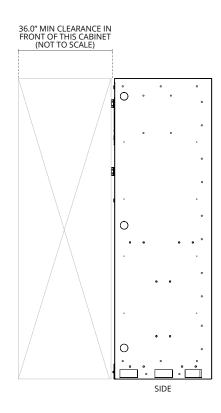
#### **DIAGRAMS**

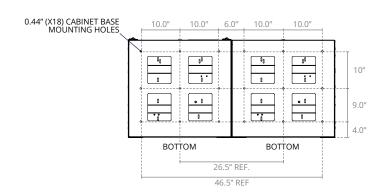
# **2 CABINET CONFIGURATION**

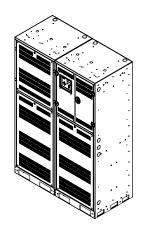














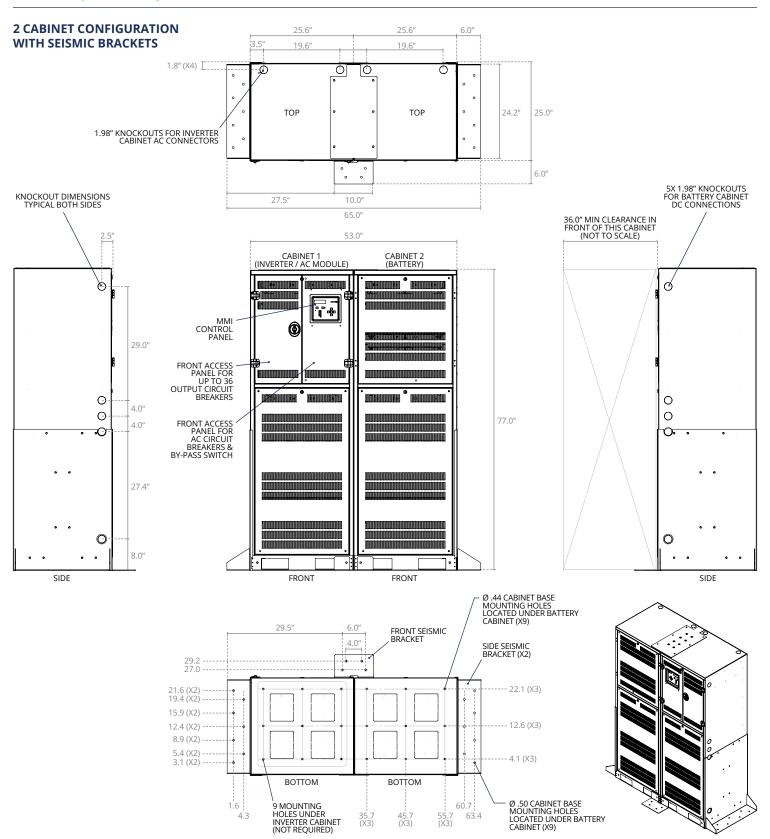








# **DIAGRAMS (CONTINUED)**











8,500-13,300 VA Split Phase Modular AC InverterW



# **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)	Al	1	30001/30002 (FLOAT)
Input Voltage (Phase B)	Al	2	30003/30004 (FLOAT)
Input Voltage (Phase C)	Al	3	30005/30006 (FLOAT)
Output Voltage (Phase A)	Al	4	30007/30008 (FLOAT)
Output Voltage (Phase B)	Al	5	30009/30010 (FLOAT)
Output Voltage (Phase C)	Al	6	30011/30012 (FLOAT)
Output Current (Phase A)	Al	7	30013/30014 (FLOAT)
Output Current (Phase B)	Al	8	30015/30016 (FLOAT)
Output Current (Phase C)	Al	9	30017/30018 (FLOAT)
Battery Voltage	Al	10	30019/30020 (FLOAT)
Battery Current	Al	11	30021/30022 (FLOAT)
Temperature	Al	12	30023/30024 (FLOAT)
Output VA (Phase A)	Al	13	30101/30102 (UINT32)
Output VA (Phase B)	Al	14	30103/30104 (UINT32)
Output VA (Phase C)	Al	15	30105/30106 (UINT32)
Battery Power	Al	16	30107/30108 (UINT32)
System Runtime (Days)	Al	17	30109/30110 (UINT32)
Inverter Runtime (Minutes)	Al	18	30111/30112 (UINT32)
Inverter Runtime (Seconds)	Al	19	30113/3014 (UINT32)
System Events	Al	20	30115/30116 (UINT32)



8,500-33,000 VA Three Phase Modular AC Inverter

DATE:	COMMENTS:
PROJECT	



# **FEATURES**

- Optional Web-based Monitoring Platform easily view, interact with, download and manage records as needed on any PC or mobile device
- Programmable and password protected user interface
- 98% efficient for minimal BTU losses
- PWM Inverter provides pure sine wave output with less than 3% THD
- Crest factor >4 overload protection for demanding high in-rush loads
- Programmable transfer time select between standard and fast transfer times for load and site compatibility
- UL listed 90 minute run-time
- Compatible with all lighting loads, including HID
- Variable time delay
- Battery recharges in less than 24 hours
- Three Phase output
- Start-Up Diagnostics checks for proper installation







# ORDERING INFORMATION E3MAX-8500-3P-LC-IF-OF-C##

1. SERIES	2. VA RATING	3. PHASE	4. BATTERY TYPE	5. INPUT VOLTAGE	6. OUTPUT VOLTAGE
E3MAX	-	- 3P	- LC -	-	-
	8500 8500 VA Three 10500 10500 VA Thre 13300 13300 VA Thre 17000 17000 VA Thre 20500 20500 VA Thre 26500 26500 VA Thre 33000 33000 VA Thre	ee Phase ee Phase ee Phase ee Phase ee Phase	<b>LC</b> Lead Calcium	IF 120V/208V L-N/L-L IG 277V/480V L-N/L-L	OF 120V/208V L-N/L-L OG 277V/480V L-N/L-L
7. OUTPUT BREAKER - NOR	MALLY ON* 10	). OPTIONS			
C* * Normally On Breakers <sup>1</sup>	M CE Di EE	Custom Breaker Delayed Transfer BW20 Extended Battery War EXTENDED TO A Trip Alarm with Break Remote Annunciator (	ranty Varranty er Not Included with TB) nal Block	BI BMS Integration BTMS Battery Thermal EO Emergency Powe WEB Web Monitoring LO Breaker Locks KE Keyed Enclosure	Management System er Off Connection <sup>2</sup>

#### NOTE

Maximum number of OUTPUT breakers supported depends on sizing and option selection. Contact factory for specific details.

#### ORDERING NOTES

- 1. See breaker configuration table on page 3 for maximum breakers.
- $2. \ \ In order to use the web-based monitoring available at \textbf{Isolite.com}, the \text{-WEB option must} be selected.$

ACCESSORIES ON BACK



8,500-33,000 VA Three Phase Modular AC Inverter





# **ACCESSORIES; ORDER SEPARATELY**

- E3MAX-MP# = Maintenance Plan plus number of years (#)
- **FS** = Factory Startup

#### **SPECIFICATIONS**

#### **OPTIONAL FEATURES**

- Maintenance bypass switch
- Circuit breakers supervised or unsupervised
- Maintenance contract/plan
- Remote Annunciator
- Factory startup increases electronics warranty to 3 years
- Circuit breaker protected loads (Switched, Normally On, and Normally Off)
- Fault summary alarm and 2 programmable alarms Form C dry contacts

#### **FRONT PANEL**

- Modern 4x20 LCD character display with white LED back-light
- Heads-up diagnostic LEDs include 5 status (AC present, battery charging, inverter power, system ready, switched load energized), fault summary LED, and 5 specific faults (unit in bypass, circuit breaker trip, startup fault, charger fault, inverter fault)
- Dedicated System Test button initiates 30-second test with UL compliant diagnostics
- 5-button keypad for menu navigation
- Sonic alarm with dedicated enable/disable pushbutton with headsup LED. Alarm silence has 24-hour ring-back for alarm reminder
- SD memory card download and store all events, tests, and alarm logs (password protected)
- USB connector access to all event, tests, and alarm logs (password protected)
- Ethernet 10 BASE-T, TCP/IP web serving

# **BATTERY**

Front access VRLA batteries with 10-Year pro-rated warranty

# **TEMPERATURE RATING**

From 68°F to 86°F
 Battery service life will be negatively impacted at ambient temperatures above 77°F

# **MAINTENANCE PLAN**

 Once per year the manufacturer's technician shall visit the site to perform maintenance and software upgrades as needed.
 Maintenance shall include battery voltage checks, torque setting verification, cleaning, and a thorough visual inspection. All electronics warranties shall be extended to the duration of the Maintenance Plan. Maintenance Plans can be purchased for a duration of 1 year to 5 years.

### **APPROVALS**

- UL 924
- New York City Approved, Calendar Number 51575
- NFPA101 Life Safety Code
- NFPA70-NEC
- OSHA
- NEMA Type 1 enclosure
- BAA Compliant

#### **BMS INTEGRATION**

- BACNet IP
- BACNet MS/TP
- Modbus TCP
- Modbus RTU

# **WARRANTY**

- Isolite warrants the E3MAX series electronics assembly against defects in material and workmanship for a period of 2 years, or 3 years with factory startup option. Extended Warranty options available.
- Isolite warrants the E3MAX series lead calcium batteries for a 1-year full and 9-year pro-rated limited warranty.
- For further details, refer to General Warranty and Obligations in the Isolite manual or on our website.
- The EEW option extends the electronics warranty to 5 years.
   Batteries are not included in the extended warranty.

### **NOTES**

- Due to power factor calculations, we recommend only loading the E3MAX inverter to 90% of load wattage.
- Max power for any phase (L-N, L-L) is 1/3 of total power capacity.
- For Single Phase, Two Phase, or Split Phase, see E3MAX-1P, E3MAX-2P, or E3MAX-SP.



8,500-33,000 VA Three Phase Modular AC Inverter





			N	IAXIMUM BREAK	ERS			
Phase	# of Breakers Normally On	# of Breakers Normally On with TA	# of Breaker Normally On with MB		# of Breakers Normally On with TA + MB	# of Breakers Normally On with TA + EO	# of Breakers Normally On with MB + EO	# of Breakers Normally On with TA + MB + EO
Three-Phase (3P)	36	24	33	33	21	21	30	18

				WEIGHT & D	IMENSIONS				
Phase	Power Rating (kW)	# of Cabinets	Width (in)	Height (in)	Depth (in)	Inverter Cabinet Weight (lbs)	Battery Cabinet Weight (lbs)	Shipping Weight (lbs)	# of Batteries
	8.5 kW	2	53	77	25	760	1600	2355	16
	10.5 kW	2	53	77	25	760	1900	2695	20
	13.3 kW	2	53	77	25	760	2336	3131	16
Three-Phase (3P)	17.0 kW	2	53	77	25	810	2820	3665	20
(51)	20.5 kW	3	79.5	77	25	810	3800	4680	40
	26.5 kW	3	79.5	77	25	890	4672	5632	32
	33.0 kW	3	79.5	77	25	890	5640	6600	40

	ELECTRICAL DATA						
		Minimum Feed Breaker Suggested Feed Breaker		Minimum Feed Breaker		- "	
Model	Power Rating (kW)	Input Voltage IF	Input Voltage IG	Input Voltage IF	Input Voltage IG	Full Load BTU/Hr	AH Ratings
E3MAX-8500-3P	8.5 kW	38.4 A	16.6 A	40 A	20 A	604	19200
E3MAX-10500-3P	10.5 kW	47.4 A	20.5 A	50 A	30 A	747	24000
E3MAX-13300-3P	13.3 kW	60 A	26 A	70 A	30 A	946	30720
E3MAX-17000-3P	17.0 kW	76.7 A	33.2 A	80 A	40 A	1208	38400
E3MAX-20500-3P	20.5 kW	92.5 A	40.1 A	100 A	50 A	1457	48000
E3MAX-26500-3P	26.5 kW	119.6 A	51.8 A	120 A	60 A	1883	61440
E3MAX-33000-3P	33.0 kW	149.0 A	64.5 A	150 A	70 A	2345	76800



8,500-33,000 VA Three Phase Modular AC Inverter







#### **OPTION DEFINITIONS**

# **Battery Thermal Management System (BTMS)**

A more advanced temperature reading configuration that measures temperature at the busbar between every two batteries.

#### **BMS Integration (BI)**

The inverter sends info to a Building Management System via a wired connection.

#### **Breaker Locks (LO)**

Allows breakers to be locked in the on or off position.

#### **Custom Breaker (CB)**

Output breakers of unique amperage/voltage.

# **Delayed Transfer (DT)**

This slows down "Fast Transfer" from 2mS to a standard transfer time of 50mS. This option is ideal for movie theaters or other places with soft ambiance lighting to avoid premature deployment of emergency lighting power in a brownout situation.

### **Emergency Power Off (EO)**

A big red button that kills power to everything.

# **Extended Battery Warranty (EBW20)**

Extends the prorated battery warranty schedule to 20 years.

#### **Extended Warranty (EW)**

Extended Warranty can be purchased only if the on-site Factory Start-Up has been purchased as well. Extended Warranty increases the electronics warranty from the standard 3 years (with Factory Start-Up) to a full 5 years.

#### Factory Start-Up (FS)

On-site Factory Start-Up includes an on-site visit from an Isolite Technician for inverter activation and demonstration. On-site Factory Start-Up increases electronics warranty from 2 to 3 years. Please see page 34 for full warranty details. To purchase and schedule Factory Start-Up, please visit our website and select "inverters" on the main menu and see "Start-Up Form." Fill out the form, and send it to the email address on the form.

Free phone start-up is available as well. For over the phone assistance with your inverter or start-up, please call our Inverter Tech Support at 800-967-5573, and they will be happy to assist you. Note that the phone start-up does not increase the warranty.

#### **Keyed Enclosure (KE)**

Locking cabinet with key for areas where unauthorized tampering is a concern.

#### Maintenance Bypass Switch (MB)

Internal switch to bypass all inverter operations. When activated, input power is transferred directly to the output breakers, allowing inverter servicing.

# Maintenance Plan (M#)

Customer may choose from 1 year (M1) to 5 year (M5) maintenance plans. Once per year an Isolite Technician will visit the site to perform maintenance and software upgrades. The maintenance includes battery voltage checks, torque setting verification, cleaning, and physically ensuring that the inverter is 100% operational. If any issues with the inverter are found, Isolite will fix or replace parts as necessary. All electronics warranty is extended to the duration of the maintenance plan. Note that the battery warranty is not extended and will keep the standard 10 year pro-rated schedule.

#### **Programmable Terminal Block (TB)**

Allows inverter operations to be output to another system such as Lutron, or Crestron. Form C dry contact ensures integration into these systems with ease.

## Remote Annunciator (RA)

An LED indicator and audible alarm which enables the user to monitor the status of the inverter from a remote lo cation where the annunciator is mounted. An annunciator located in a separate office will alert those present that the inverter is in an alarm condition.

#### Seismic Restraints (Z4)

Seismic Restraints are shaker table tested and seismic certified to the latest California Building Code (CBC) 2016. Shake table testing was performed in accordance with International Code Council Evaluation Service Acceptance Criteria 156 (ICC-ES AC156) and is OSHPD approved. For more details, please reference our Seismic Certified Inverters booklet. Locked cabinet (KE) standard when Z4 is chosen.

# Trip Alarm with Breaker (TA)

Trip Alarm is a feature of Isolite Inverters that notifies the instrument panel if any breaker output is tripped. This will broadcast an alarm to the remote (\*requires additional Remote Annunciator (RA) purchase).

#### Wall Mounting Bracket (WB)

Mounts inverter to the wall (E3MAC-1000 only).

#### Web Monitoring Connection (WEB)

Access critical data from the inverter through the internet.





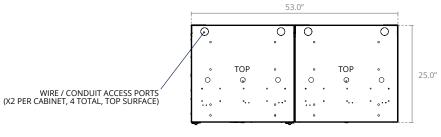


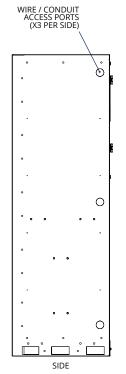


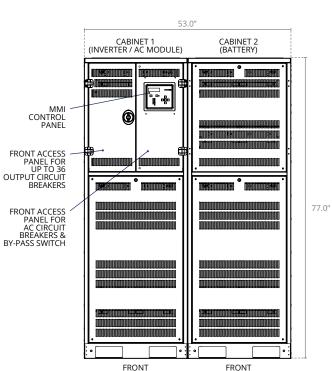


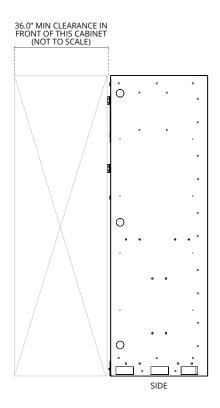
#### **DIAGRAMS**

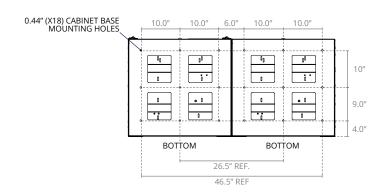
# **2 CABINET CONFIGURATION**

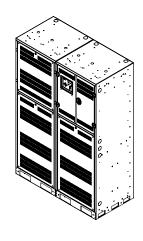


















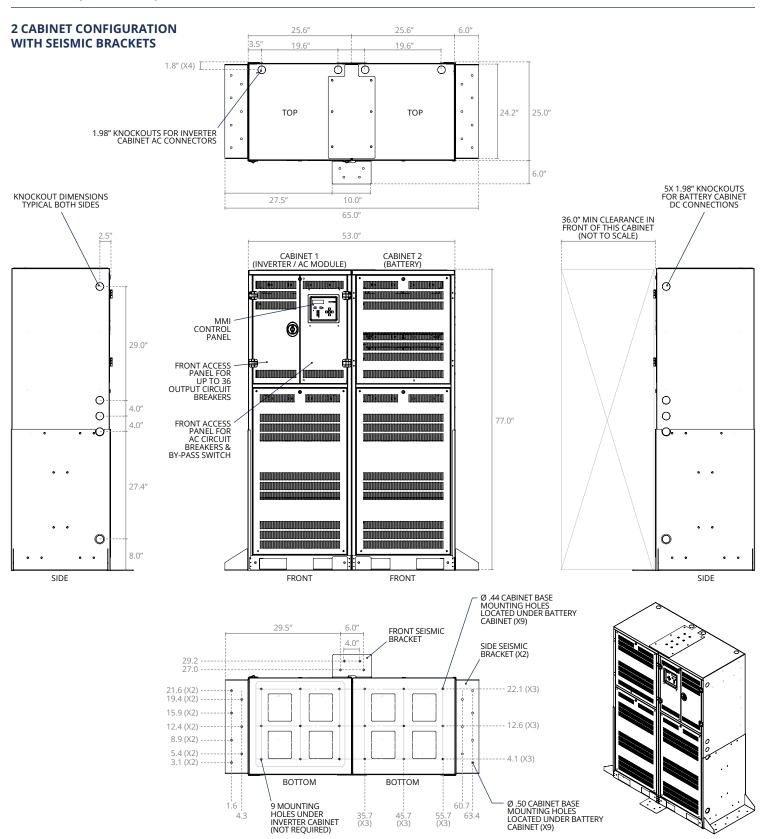


8,500-33,000 VA Three Phase Modular AC Inverter





# **DIAGRAMS (CONTINUED)**







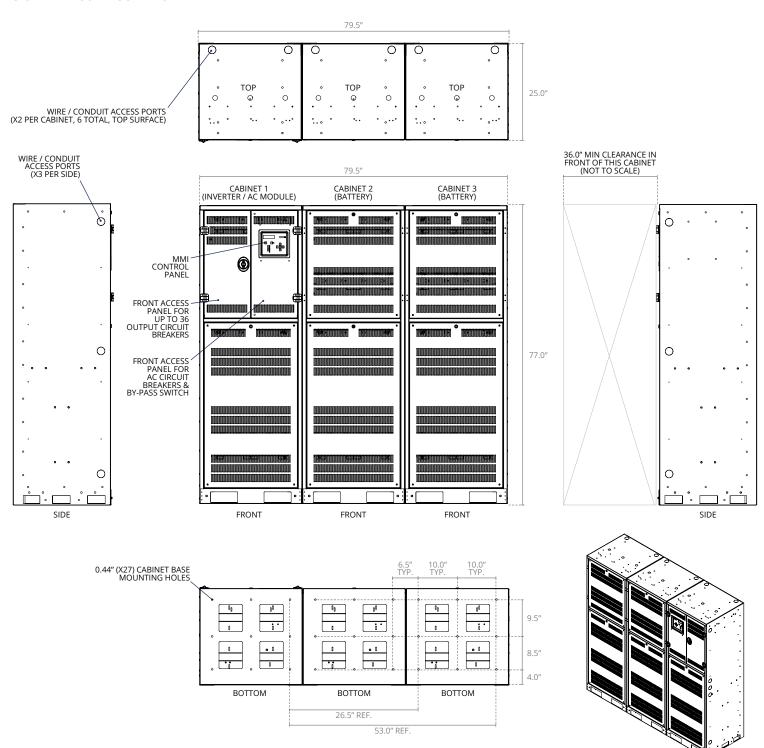






# **DIAGRAMS (CONTINUED)**

# **3 CABINET CONFIGURATION**





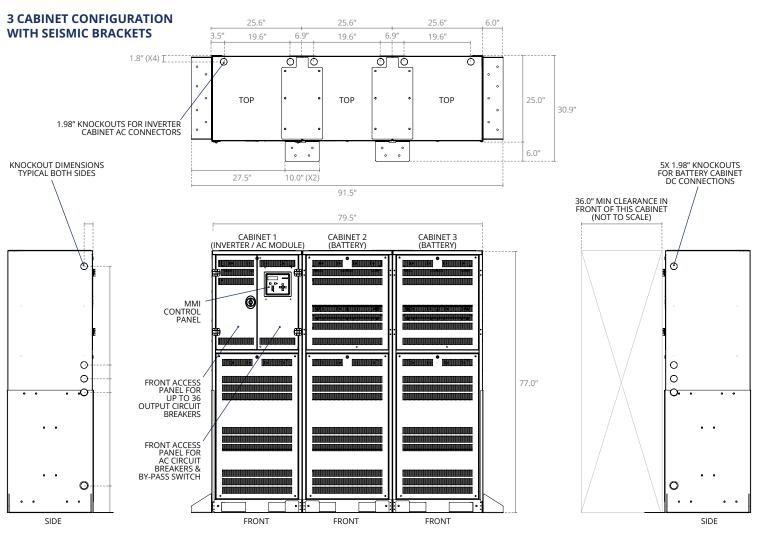


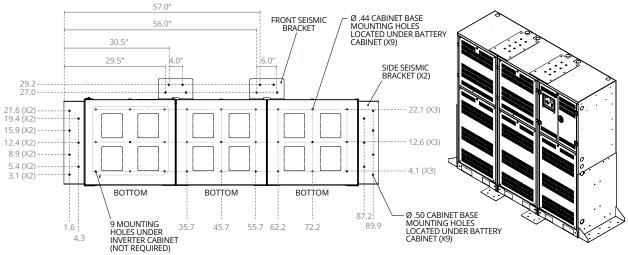






# **DIAGRAMS (CONTINUED)**











8,500-33,000 VA Three Phase Modular AC Inverter



# **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)	Al	1	30001/30002 (FLOAT)
Input Voltage (Phase B)	Al	2	30003/30004 (FLOAT)
Input Voltage (Phase C)	Al	3	30005/30006 (FLOAT)
Output Voltage (Phase A)	Al	4	30007/30008 (FLOAT)
Output Voltage (Phase B)	Al	5	30009/30010 (FLOAT)
Output Voltage (Phase C)	Al	6	30011/30012 (FLOAT)
Output Current (Phase A)	Al	7	30013/30014 (FLOAT)
Output Current (Phase B)	Al	8	30015/30016 (FLOAT)
Output Current (Phase C)	Al	9	30017/30018 (FLOAT)
Battery Voltage	Al	10	30019/30020 (FLOAT)
Battery Current	Al	11	30021/30022 (FLOAT)
Temperature	Al	12	30023/30024 (FLOAT)
Output VA (Phase A)	Al	13	30101/30102 (UINT32)
Output VA (Phase B)	Al	14	30103/30104 (UINT32)
Output VA (Phase C)	Al	15	30105/30106 (UINT32)
Battery Power	Al	16	30107/30108 (UINT32)
System Runtime (Days)	Al	17	30109/30110 (UINT32)
nverter Runtime (Minutes)	Al	18	30111/30112 (UINT32)
nverter Runtime (Seconds)	Al	19	30113/3014 (UINT32)
System Events	Al	20	30115/30116 (UINT32)