



# TRYPSTAR®

**EON™  
MODEL EL3**

**Centralized  
Emergency Lighting Inverters**



**10 kW-55 kW THREE  
PHASE**

**Applications:**

- Theaters / Concert Halls
- Auditoriums
- Worship Facilities
- Conference / Banquet Centers
- Shopping Malls
- Casinos
- Sports Facilities
- University Buildings
- Healthcare Facilities
- Correctional Facilities
- Subway / Train Stations
- Industrial Manufacturing
- Warehouses

## EMERGENCY LIGHTING REQUIREMENTS

Trystar engineers and manufactures the industry's highest quality **centralized emergency lighting inverters**, capitalizing on many years of expertise. We have an enviable reputation for quality, which is reflected in the design, workmanship, and performance of our products.

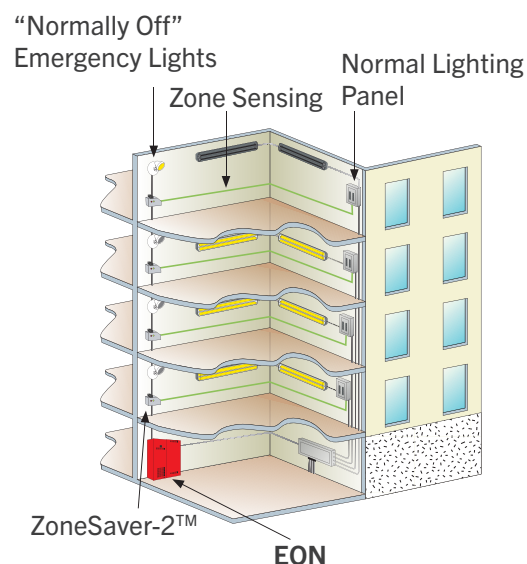
### The “EON Model EL3” = Life Safety

Apart from the existing emergency lighting codes, many U.S. cities and states have adopted legislation that requires buildings with 5 or more units of occupancy to have a **centralized emergency lighting system**, where single-point operation controls a facility's many smaller circuits, and all testing and record-keeping of the emergency power equipment is performed from one location.

Meeting stringent requirements in construction and performance, Trystar's self-diagnostic, self-testing **EON Model EL3 centralized emergency lighting inverter** is UL 924 listed as “Emergency Lighting Equipment” and “Auxiliary Lighting and Power Equipment”, as well as NFPA compliant as “Life Safety Equipment”.

The **EON** offers more security and versatility to meet illumination requirements, and is the perfect complement for all life safety and lighting applications.

Our inverter technology effectively maintains critical equipment with extended brownout protection, tight voltage regulation, and power conditioning. Tight voltage regulation assures that facility egress lumens are maintained 100% at emergency lighting fixtures, in all modes of operation, and also extends ballast, LED driver, and lamp life.



**NOTES:** For illustration purposes only; drawing not to scale.

## “EON Model EL3” Advantages

### Design Flexibility

Using existing fixtures for emergency lighting and egress assures compliance with minimum illumination code requirements. Extensive combinations of input and output voltages, timed off bus with remote “command on” control, automatic battery testing, and control device override options make the **EON** one of the most versatile and dependable lighting inverter systems in the market.

### Single Point Operation / Maintenance

One central inverter controls many smaller circuits. Cost-effective, single-point operation provides a common battery pack, and enables all maintenance to be performed and records to be logged from a single location. Additional benefits include:

- Egress lighting integrity test.
- Hot-swappable battery replacement
- Standard internal bypass.
- Maintenance-free, standard 15-year pro-rated batteries.

### Premium Power And Voltage Regulation

Maintains proper operating voltage for HID and high-pressure sodium lighting, as well as electronic ballasts and LED lighting, resulting in:

- Voltage sag and surge protection.
- Longer wire runs without upsizing the wire. Regulated voltage source minimizes voltage drop.
- Less-frequent replacement of ballasts, LED drivers, and lamps.
- Facility egress lumens are maintained 100% (will not diminish) over the full 90 minutes of emergency power.

### Generator Compatible

The **EON** is listed “UL 924 Auxiliary Lighting and Power Equipment”, and is suitable to provide uninterrupted back-up power, until a generator starts. Even with an extremely distorted input waveform, the output of the **EON** delivers a clean sinewave, with typically less than 3% THD, without switching to batteries. This feature also extends ballast, LED driver, and lamp life.

### Reduced Utility Expense

Energy conservation continues to be a prevalent issue. The **EON** provides several energy-saving solutions without compromising life safety requirements. Use of our optional **ZoneSaver-2™**, “emergency lighting control unit”:

- Allows for local control of emergency lighting fixtures to reduce / eliminate unnecessary night-light circuits and “always on” lighting loads.
- Allows for automatic bypassing of the local control device during NFPA-mandated test periods.
- Provides multiple, independent zone sensing abilities to reduce / eliminate unnecessary multiple-floor and multiple building-wing illumination

(Refer to the illustration to the Right.)

**All of these advantages result in the best reliability and net performance of your lighting system!**

## EON DESIGN BENEFITS

As an owner or specifying engineer... why choose the **EON Model EL3** over competing brands? It's a fair question. **We believe that the answer is found in (4) key objectives which needed to be met when we designed this product ... and we would like to share those with you:**

### ✓ Full Compliance With NFPA 101

The **EON** meets the NFPA 101 definition of a **computer based, self-testing / self-diagnostic emergency lighting system with data-logging**. Both periodic and annual tests are performed automatically, and the results are logged with a date and time stamp. Both alarm and test logs provide a history of events, and the ability to generate an NFPA-compliant report. The **EON's** online design allows for continuous local and remote monitoring of all internal systems. Any abnormal condition is identified, logged, and immediately communicated.

### ✓ Reliable Operation

Reliability is the most important feature of any emergency power source! Without it, all the other features and benefits are meaningless. This is why state-of-the-art, DSP-controlled, IGBT circuitry is used for the **EON's** rectifier and inverter power sections. Also essential to the design, are the fiber optic cables for control and communications. Fiber optics allow for better isolation; and faster, more accurate, noise-free signals between processors. The **EON** provides reliable, regulated voltage during normal and emergency power modes.

The **EON** is designed to be compatible with all lighting fixture types, including LED. The **EON** also allows for full design flexibility, used to power both normally on and normally off emergency lighting loads, in any combination. The **EON's** off bus option includes user-programmable transfer on delay, transfer off delay, and "remote input command". (See Page 14 for details.)

### ✓ LED Inrush Compatible

Lighting designs for new construction and retrofit projects are now including LED fixtures... and of course, some of these LED fixtures will be designated for emergency egress lighting. To stay on par with the LED lighting trend, we've designed the **EON** with a peak overload capability of 1700% to accommodate the inrush current from LED fixtures / drivers while the inverter is fed from the AC power source, or even while in battery mode!

### ✓ Easy Installation & Low Cost Of Ownership

The **EON's** 90 minute configuration requires only one (1) battery cabinet up to 33 kW, or two (2) cabinets from 40 kW to 55 kW. For all models, only batteries with front access terminals are used. This makes installation easy and less time consuming — installation is straightforward and DC connections are easily made.

Cost of ownership is greatly reduced because of single point operation and maintenance, as well as the automatic testing, logging of results, and reporting that are performed. Also know that the **EON** provides the required 90 minutes of runtime using a lower number of batteries as compared to most competitors' products. This often results in a lower replacement cost — both time and material.

Compact Footprint

Facility floor space is hard to come by, and is always at a premium. With this in mind, the **EON's** “front access” cabinetry is thoughtfully designed to be physically smaller than comparable emergency lighting inverter products, without compromising installation, performance or serviceability. This attribute can be seen on models from 10 kW to 55 kW, and is best illustrated in our 33 kW comparison. Can you imagine saving up to 5-6 feet of wall space, making it available for other essential equipment?

	Output Rating	Width (in.)	Depth (in.)	Height (in.)
EON	33 kW	70	33	77
Competitor A	32 kW	130	32.5	71
Competitor B	33 kW	140	31	72

**Note:** Dimensions include 90 minutes of battery at full load.



**Note:** Illustration depicts 33 kW product without standard floor channels.

ADVANCED DIGITAL MONITORING

Advanced Digital Monitoring —The Intellistat TS™

The **EON** includes a user-friendly **Intellistat TS™** monitor, which provides quick, full-access to all of the inverter's features, allows all programming to be done directly from the touchscreen display, and provides complete system diagnostics and testing. A color, TFT, high resolution touchscreen display indicates all the electrical parameters, as well as the functional status of the inverter. The touchscreen display allows the entry of the date / time values, system setpoints, and password information into the monitor, without the need for an external computer and cable.

The **Intellistat TS's** features include:

- LCD display of all electrical parameters.
- NFPA-compliant automatic battery testing / logging.
- User-programmable automatic system testing.
- System alarm annunciation.
- Audible alarm with alarm silence.
- Alarm status display.
- Programmable alarm set-points.
- Date and time display.



The color touchscreen display on the **Intellistat TS** provides all electrical parameters, inverter status, programmable inverter and battery testing, and data-logging. Optional **Intellistat TS** communications allow for remote monitoring and reporting via BACnet/IP or BACnet MS/TP, Ethernet TCP/IP, MODBUS TCP, or MODBUS RS485. For more details, see the Network Communications description on Page 12.

- Auto-logging of test results and abnormal events.
- Multi-layer password protection.
- Logs up to 75 events.
- Non-volatile clock and memory.
- Remote monitoring capabilities.
- Optional reporting of test results via e-mail / voice / webpage.
- Optional status notification via e-mail / cell phone.

## Monitored Parameters

The **Intellistat TS** monitors **3-phase input and output** parameters, and inverter status indicators:

- Voltage
- Frequency
- Current
- VA
- Watts
- Power factor
- kVA and kW totals
- Output percent load L-N (% kVA)
- Output percent load total (% kVA)
- Battery voltage
- Battery charge / discharge current
- Battery time (minutes) remaining

## Alarms & Status

The **Intellistat TS** announces multiple alarms, including:

- Input phase rotation error
- High / low input voltage
- High / low input frequency
- High / low output voltage
- High / low output frequency
- High output VA (overload)
- \* Low output VA
- High / low battery voltage
- High battery charger current
- System normal
- IGBT fault
- Overtemp shutdown

- System on battery
- Low battery warning
- Low battery shutdown
- Battery test in progress / time remaining
- Auto battery test failed
- Off bus status
- DC charger fail / DC open
- Output circuit breaker open
- REPO shutdown
- Manual restart required
- Static bypass status / alarms
- System in manual bypass

\* User-programmable limit referenced during automatic battery testing, to verify integrity of egress lighting.

## Egress Lighting Integrity Test

This feature provides the industry's most advanced life safety system test available. To satisfy NFPA-mandated periodic and annual requirements, the **Intellistat TS** automatically initiates the testing of all life safety circuits, regardless of egress lighting design ("always on" or "normally off"). The **Intellistat TS** then compares power consumption during the test period with userdefined load capacity, analyzes the data, and advises if service is required.

During these NFPA-mandated tests, an optional "test activated" contact may be used to activate one or more remotely installed **ZoneSaver-2** emergency lighting control units. When activated, the **ZoneSaver-2** will feed emergency power to egress lighting that is normally off, or dimmed / turned off via a local control device. This option allows for automatic testing of the locally controlled life safety circuit and the **ZoneSaver-2** control unit.

## Automatic System Tests

The **Intellistat TS** automatically performs a user-defined (date and time) 5-minute system test every 30 or 90 days. It also performs user-defined (date and time) 30-, 60-, or 90-minute, or 2- or 4-hour annual system tests. For all of these tests, the **Intellistat TS** logs the test results with date and time, as well as a "pass" or "fail" indication.

## Manual System Tests

The **Intellistat TS** also allows the user to manually invoke a user-defined system test for 30-, 60-, or 90-minutes, as well as 2- or 4-hours. A 1-minute or 5-minute manual test is also available for "spot inspections".

## SPECIFICATIONS

### Power

Ratings (kVA/kW)	10, 13, 14, 15, 16, 17, 20, 22, 24, 26, 28, 30, 32, 33, 40, 45, 50, 55 at 1.0 (unity) power factor
Topology	True online double-conversion, uninterruptible power

### Electrical Input

Nominal Voltage	208/120V, 480/277V or 600/347V Wye, 60Hz. Consult factory for 50Hz models
Voltage Range	+10%, -15% at full load
Operating Frequency	+/-5% from nominal
Power Factor	> .98 typical
Current Distortion	< 10% THD
System AIC Rating	10k AIC standard; 65k or 100k AIC optional

### Electrical Output

Nominal Voltage	208/120V, 480/277V or 600/347V Wye, 60Hz. Consult factory for 50Hz models
Voltage Range	+/-3% from nominal typical
Frequency	+/-0.5% while in battery operation mode
Overload	Up to: 110% for 2 minutes, 125% for 30 seconds, 150% for 10 seconds, 400% for 4 cycles (without use of static bypass)
LED Inrush Rating	Peak overload capability of 1700% to accommo- date inrush current from LED fixtures (without use of static bypass)
Voltage Distortion	3% maximum THD with a linear load
Efficiency	90% typical

### Battery

Type	Valve-regulated, sealed lead calcium, mainte- nance-free. Front access terminals
Testing	Manual: Password-protected Automatic: User-programmable
Runtimes	Standard and optional runtimes available (See Page 12 "Battery Runtimes")
Nominal Voltage	Factory-programmable from 216-408 VDC, or from 132-168 VDC, kW, model, and runtime dependent
Charger	3-stage, temperature compensated
Recharge Time	UL 924 and NFPA 101, 111 compliant
Battery Replacement	Hot-swappable batteries — replaced without interrupting power to the load

### Certifications

Safety	UL 924 Listed - Emergency Lighting Equipment
	C-UL Listed to CSA C22.2 No. 141-15 -Emergency Lighting Equipment
	UL 924 Listed - Auxiliary Lighting and Power Equipment
	NFPA 101, 111, NEC, and local codes
EMI Compliance	FCC Class A limits, 47 C.F.R. Part 15, Subparts A, B
Quality	ISO 9001:2015

### General

Diagnostics	Continuous system self-check, including battery health
Static Bypass	Automatic bypass on overload or system failure
Internal Bypass	Standard Make-Before-Break switch with a secure push-to-turn function that provides an uninterrupted bypass of the inverter system
Maintenance Bypass	Wrap-around, 4pole BBM or MBB switch options available with a secure push-to-turn function.(See pages 12 and 14 for details.)
Input / Output Breakers	LSI breakers are standard or optional, contact closure to shut off the inverter system
Remote Emergency Power Off (REPO)	Optional input relay interface allows external contact closure to shut off the inverter system
Normally Off Bus	Optional standby output for use with “normally off” circuits feeding emergency lighting fixtures (See Page 14 for details)
Output Distribution	Optional output circuit breakers (See Page 14 for details)
Dimensions/Weight	See model number matrix on Page 15 for weights, and Page 11 and 12 for cabinet dimensions

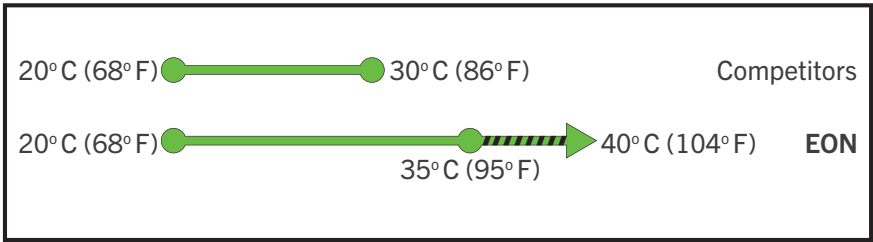
### Communications

LCD Display	High resolution, color touchscreen display for monitoring system status and parameters, and to access programmable inverter and battery testing
Communication Port	RS232 serial communications for factory setup and authorized field service access
Network / Web	Remote monitoring and reporting via optional BACnet/IP or BACnet MS/TP, Ethernet TCP/IP MODBUS TCP, or MODBUS RS485. (See Page 12 for details.)
Relay Interface	Optional potential-free isolated status and alarm contacts via hardwired terminal strip. Contacts rated for 2A at 30 VDC, or 1A at 120 VAC

Environmental

Operating Temperature	20°C to 35°C for UL 924 Listed models and C-UL Listed models to CSA C22.2 No. 141-15 (See illustration and note below.)
	Optimum battery performance and life at 25°C
Storage Temperature	Inverter at -20°C to 50°C Battery storage at 25°C for 6 months before charging is required. For each 9°C rise, reduce storage time by half
Relative Humidity	0 to 95% non-condensing
Audible Noise	< 60 dBA at 1 meter
Altitude	6600 feet (2000 meters) without derating

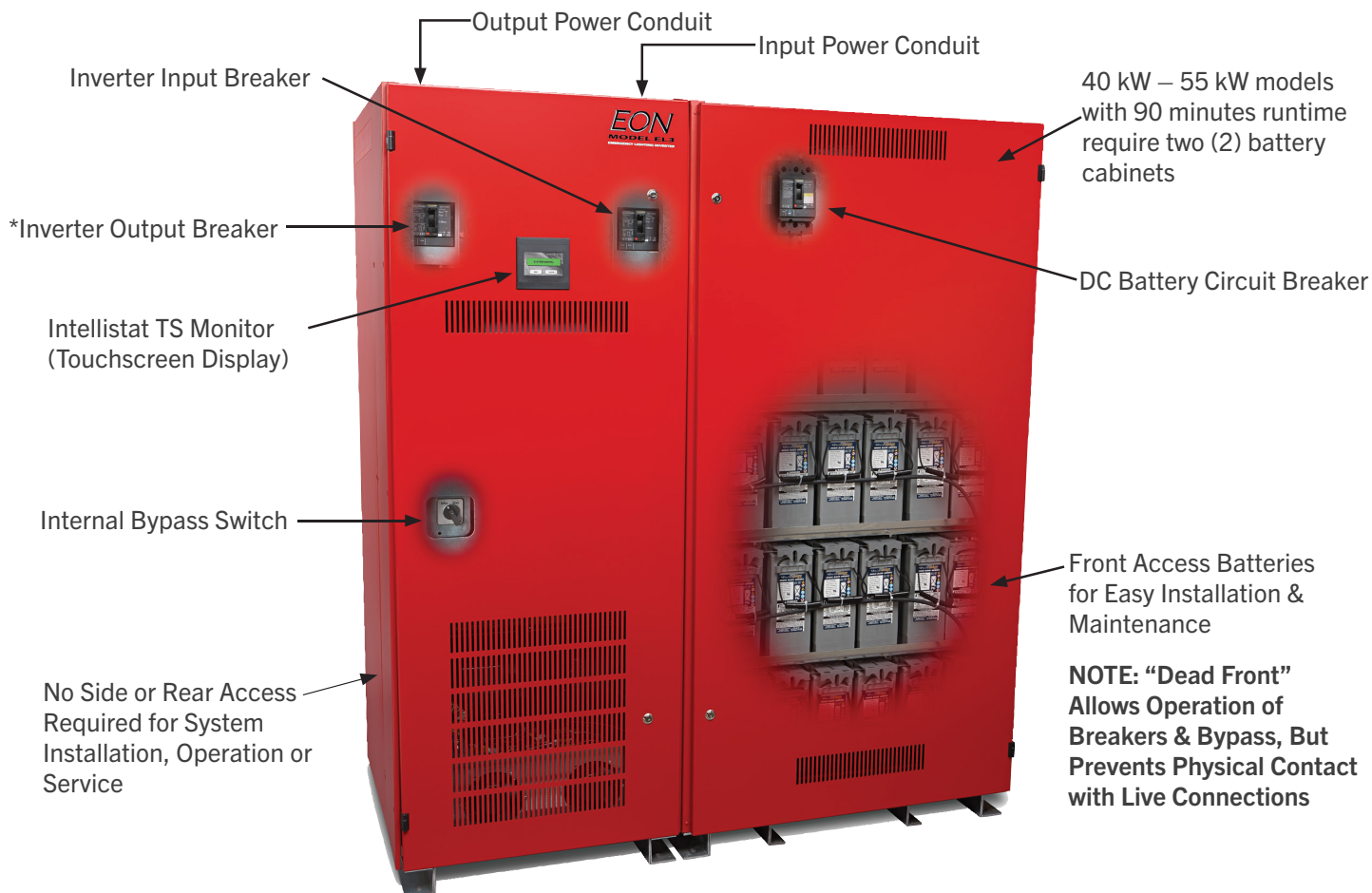
UL Rating Temperature Test Comparison



**NOTE:** To satisfy UL 924 and CSA C22.2 No. 141-15 requirements for a 35°C rating, UL testing was performed in a 40°C ambient environment, with units tested under full load and at low line input voltage.

## PRODUCT LAYOUT & DIMENSIONS

### Advantages of the Front Access “EON Model EL3”



**NOTES:** The callouts above reflect standard features. LSI input / output breakers are standard or optional, model-dependent; consult factory.

\* Monitored output circuit breaker standard on C-UL listed models, optional on UL 924 listed models.

Cabinet Configurations (10 kW – 33 kW)



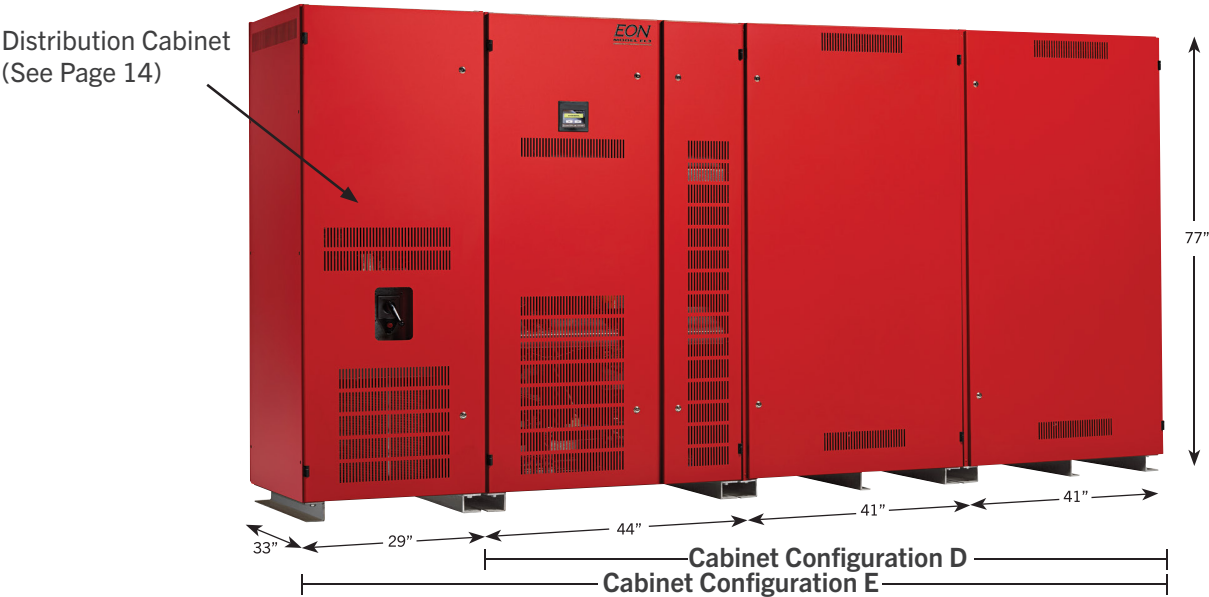
Cabinet Configuration A

Cabinet Configuration B

Cabinet Configuration C

DIMENSIONS & INVERTER OPTIONS

Cabinet Configurations (40 kW – 55 kW)



See Page 15 for specific inverter models and their cabinet configurations.

## Inverter Options (10 kW – 55 kW)

### Battery Runtimes

All UL 924 models listed as Emergency Lighting Equipment are provided with a standard 90 minutes of battery backup; and C-UL models are provided with a standard 30 minutes. Consult factory for other C-UL listed runtimes. Optional runtimes include 15, 30, 60, 120, and 240 minutes at full rated load. When optional runtimes are provided, the emergency lighting inverter is UL 924 listed as “Auxiliary Lighting and Power Equipment”. Consult factory for battery option weights and cabinet configurations.

### Wall Mounted Maintenance Bypass

On systems in which the nominal input and output voltages are the same, an optional external, wall-mounted, push-to-turn, 4 pole Break-Before Make (BBM) or Make-Before-Break (MBB) wrap around maintenance bypass switch is available. When in bypass mode, the switch bypasses the system to allow for isolation of the inverter’s input and output, and to enable the inverter to be fully serviced (including the complete maintenance and replacement of circuit cards or components). The bypass switch includes an auxiliary contact to indicate the position of the switch (normal or bypass) for local or remote monitoring purposes, and is provided with a padlock attachment for lockout / tagout purposes during maintenance.

**NOTE:** At 10 kW – 33 kW, this option cannot be used together with the Output Distribution option (described on Page 14).

At 40kW - 55kW, this option is available for inverter systems configured with an input and output of 480/277 VAC only. For other voltage configurations, a wrap-around maintenance bypass switch option is available and located within the system’s distribution cabinet. (See Page 14 for details.)

### Status / Alarm Relay Contacts

Isolated, potential free (Form C) relay contacts, rated for 2A at 30 VDC or 1A 120 VAC, are available via a terminal strip for customers’ hardwired connections to building monitoring and security systems. Status / alarm contacts include inverter on, on battery power, low battery, general alarm, in bypass, periodic or annual test activated, output circuit breaker open, battery test pass, and battery test fail.

### Network Communications

The **EON’s Intellistat TS** monitor is available with optional network communications. When selected, the **Intellistat TS** integrates the **EON** into a BACnet/IP or BACnet MS/TP, Ethernet TCP/IP, MODBUS TCP, or MODBUS RS485 network, with a specific IP address for Ethernet connected systems. The **Intellistat TS** provides remote monitoring of the inverter status, battery test pass/fail results, alarm conditions, and electrical measurements via a web browser, without the need for any external software. Remote notification of alarms and status are available via SNMP, e-mail, text messaging, or the user’s building management system.

## INVERTER OPTIONS

### Models 10kW – 33kW

#### Output Distribution

Provided in a side-mounted, 14" wide, front access distribution cabinet, a total of 12 pole positions per phase (36 total) are available to accommodate 1, 2, and 3 pole circuit breakers fed from an inverter system output of 208/120 VAC or 480/277 VAC. These circuit breakers are located behind a secured, lockable, hinged door; and can be factory-wired to the "Normally On" bus and/or "Normally Off" bus in any combination specified.

Monitored output circuit breakers are available, reducing the number of pole positions to 8 per phase (24 total). If a circuit breaker is open, the **Intel-listat TS** monitor sounds an alarm. Optional alarm relay contacts are also available.

#### Normally Off Bus

Available on 10 kW – 55 kW models, this option provides standby power to "Normally Off" circuits feeding emergency lights when utility power is lost or inadequate, or if energized via a remote alarm contact. This option includes:

#### User-Programmable Settings

Transfer On Delay (0 - 8 seconds)

Transfer Off Delay (0 - 15 minutes)

#### Remote Input Command

Allows a remote alarm contact signal to energize the "Normally Off" bus, thus illuminating the "Normally Off" emergency lights.

### Models 40kW – 55kW

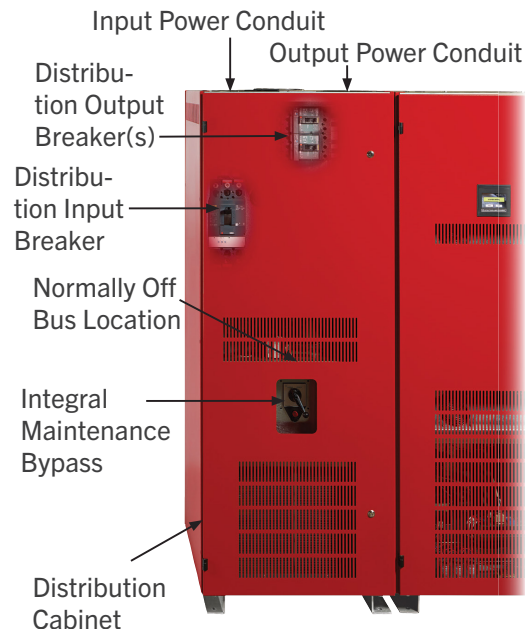
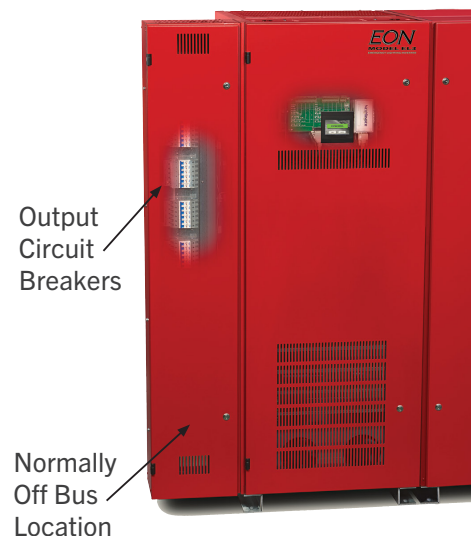
#### Output Distribution

Systems are available with a front access distribution cabinet containing a main input circuit breaker, and up to four (4) factory-installed 3-pole output circuit breakers, amperage-rating dependent. All breakers are located behind a secured, lockable, hinged door; and output breakers can be wired to the "Normally On" bus and/or "Normally Off" bus in any combination specified.

Monitored output circuit breakers may be specified, without reducing the number of breakers available. If a circuit breaker is open, the **Intellistat TS** monitor sounds an alarm. Optional alarm relay contacts are also available.

#### Integral Maintenance Bypass

This integral, push-to-turn, 4 pole Make-Before-Break (MBB), wrap-around maintenance bypass switch option is physically located within the Distribution Cabinet, and may be used with any available voltage configuration. This switch bypasses / isolates the 480/277 VAC inverter section (cabinet), and is provided with a padlock attachment for lockout / tagout purposes during maintenance. The switch also includes an auxiliary contact to indicate the



NOTE: Distribution Cabinet is optional with NNX models, but standard with LLX, NLX, VVX, and VLX models. Input and output transformers required for these models are located within the Distribution Cabinet.

position of the switch (normal or bypass) for local or remote monitoring purposes.

PRODUCT SELECTION GUIDE

EON MODEL NUMBER GUIDE

PRODUCT	INPUT	OUTPUT	FREQ	OUTPUT kVA / kW	MONITOR	BATTERY	OUTPUT DISTRIBUTION	RELAY INTEFACE OPTIONS
EON	L=208/120V N=480/277V V=600/347V	L=208/120V N=480/277V V=600/347V	X=60Hz	10KW 26KW 13KW 28KW 14KW 30KW 15KW 32KW 16KW 33KW 17KW 40KW 20KW 45KW 22KW 50KW 24KW 55KW	1 = Intellistat Intellistat with 2 = TCP/ IP MODBUS TCP MODBUS RS485 BACnet/IP BACnet MS/ TP	S = 90 min C = 30 min* D = 60 min* N = Other Battery Option	0 = Integral Main CB Only 1 = Distribution Cabinet** 2= Distribution Cabinet w/Normally Off Bus**	0 = None Provided 1 = Output Alarm Relay Contacts, and Off Bus “Command On” & REPO Inputs 2 = Off Bus “Com- mand On” & REPO Inputs Only

Model Number Example:

EON-NNX-33KW-2S11

**\*BATTERY:** Letters “C” and “D” are for C-UL Listed inverters with 30 minute or 60 minute battery runtimes intended for the Canadian market. All inverter models are C-UL Listed with 30 minutes runtime. Optional 52 kW inverter output rating available with 30 minutes runtime only. Consult factory for inverter models C-UL Listed with 60 minutes runtime.

**NOTE:** Consult factory for output circuit breaker options provided within the Distribution Cabinet.

**\*\*DISTRIBUTION CABINET:** Standard for 40KW - 55KW units with LLX, NLX, VVX, and VLX models, and optional for NNX models.

EON SERIES MODEL NUMBERS						
UL 924 MODELS WITH 90 MINUTE BATTERY	kVA / kW	WEIGHTS (LBS)1			BTU'S / HOUR <sup>2</sup> FULL LOAD	CABINET CONFIGURATION <sup>3</sup>
		208/120V IN 208/120V OUT	480/277V IN 208/120V OUT	480/277V IN 480/277V OUT		
EON—**X—10KW—S**	10	2840	3708	3120	3410	208/120 VAC Input = A
EON—**X—13KW—S**	13	3200	4068	3642	4433	480/277 VAC Input = B
EON—**X—14KW—S**	14	3350	4306	3880	4774	B
EON—**X—15KW—S**	15	4634	4416	4118	5115	
EON—**X—16KW—S**	16	4634	4416	4118	5456	
EON—**X—17KW—S**	17	4872	4654	4356	5797	
EON—**X—20KW—S**	20	5702	5368	5032	6820	C
EON—**X—22KW—S**	22	6178	5844	5270	7502	B
EON—**X—24KW—S**	24	5970	5636	5000	8184	
EON—**X—26KW—S**	26	6359	6026	5300	8866	480/277 VAC Input=B 208/120 VAC Output=C
EON—**X—28KW—S**	28	6359	6026	5600	9548	C
EON—**X—30KW—S**	30	6659	6326	5900	10230	
EON—**X—32KW—S**	32	6959	6626	6200	10912	
EON—**X—33KW—S**	33	7259	6926	6200	11253	
EON—**X—40KW—S**	40	10726	10206	9340	13640	480/277 - 480/277 VAC = D
EON—**X—45KW—S**	45	11686	11166	10300	15345	208/120 - 208/120 VAC = E
EON—**X—50KW—S**	50	12250	11730	10780	17050	480/277 - 208/120 VAC = E
EON—**X—55KW—S**	55	12730	12210	11260	18755	

VOLTAGE CONFIGURATIONS		
**X = INPUT — OUTPUT VAC, 60 Hz		
LL = 208/120 - 208/120	LN = 208/120 - 480/277	LV = 208/120 - 600/347
NL = 480/277 - 208/120	NN = 480/277 - 480/277	NV = 480/277 - 600/347
VL = 600/347 - 208/120	VN = 600/347 - 480/277	VV = 600/347 - 600/347

**10kW - 33kW:** All voltage configurations available.

**40kW - 55kW:** LL, NL, NN, VL, VV configurations available.

**Seismic-Rated Models:** Optional seismic-rated models (10kW – 33kW) are designed and tested in accordance with applicable portions of the following standards:

- ICC – AC156: “Acceptance Criteria for Seismic Certification by Shake-Table Testing of Nonstructural Components and Systems”
- California Building Code – CBC 2016
- International Building Code – IBC 2015

Seismic-rated models are designed for floor mounting using seismic brackets provided. Consult factory for details. Seismic and standard unit weights are the same.

**NOTES:** Each model includes 90 minutes of battery back-up time, per UL 924 Emergency Lighting Equipment. Battery runtimes other than 90 minutes are available under UL 924 (Auxiliary Lighting and Power Equipment) and C-UL (for Canada) – consult factory.

<sup>1</sup> Unit weights include the weight of the batteries for standard 90 minute runtime. Battery weights vary according to desired runtimes – consult factory for runtimes other than 90 minutes.

<sup>2</sup> Stated full load BTU's for 480/277 VAC input – output models. Consult factory for BTU's of other models.

<sup>3</sup> Cabinet configurations reflect 90 minutes of battery back-up time, and are determined by the number and model of batteries used. Consult factory for cabinet configurations of models with other runtimes. (See Pages 6 and 7 for cabinet configuration dimensions. Consult factory for cabinet configurations and dimensions of 40 kW – 55 kW models with less than 90 minutes runtime.)





TRYSTAR®