

# **Power Conversion System**

Lync™ 250 delivers uninterruptible power to facilities, lowers facility energy costs, integrates renewables and other DERs into a resilient microgrid and provides grid-stabilizing energy services to utilities.

Lync™ 250 is Go Electric's patented power conversion system (PCS) that provides uninterruptible power to critical loads with a single conversion active front end inverter design. Embedded in the system is the AutoLync™ Microgrid Controller that, combined with local microprocessors, controls DER assets in real-time, maintains power stability and prevents any load or generation imbalances.

AutoLync™ optimizes the DER's to operate in specific use-case scenarios that deliver maximum economic value stacking to the customer – such as generator optimization, power factor correction, and economic dispatch.

## **Applications**

- Grid-Tied Operation with "Blip-less" Grid-Catching / UPS Functionality
- · Black start capable
- · Islanded operation
- Fast frequency response
- Power factor (kVAR) response
- · Generator hybridization
- Renewable energy management and optimization
- · Peak shaving
- Demand response
- · Energy arbitrage

The Lync™ 250 is constructed to be an all-inone PCS. On top of the base inverter power section, it includes a transformer, reactor assembly, motor operated breaker, protective relay, metering and a control panel with an integrated AutoLync™ microgrid controller.



### Benefits at a glance

- Customizable Sequence of Operation with AutoLync™ microgrid controller
- Uninterruptable power with grid disturbances
- Grid forming with full 4 quadrant P & Q capability
- · Islanding and resiliency capability
- · Increased renewable penetration

- Increased power stability in islanded mode with renewable intermittency
- Avoid power factor charge penalties
- Avoid demand charges and TOU charges
- Low short-circuit fault currents with built in transformer
- Reduced generator 0&M when operating in islanded mode

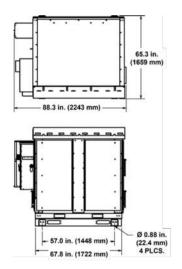
Parameter	Lync™ 250
AC	
Current Harmonic Distortion (THDi)	<3% per IEEE519
Power Rating	250 kVA
Nominal Output Voltage	480 V
Nominal Output Frequency	60 Hz
Maximum Continuous Operating Current	301 A
Maximum Output Fault Current	4000 A
Maximum Output Overcurrent Protection	65 kA
Power Factor	0.90 lagging - 0.99 leading
Reactive Power Capability	Four quadrant operation

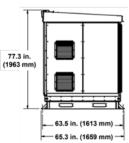




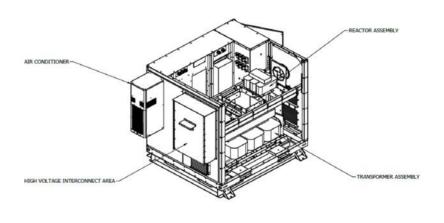
This all-in-one design provides the key innovation of synchronizing and connecting to an AC utility grid while simultaneously maintaining power to a critical load. The fully equipped microgrid design allows the system to switch between various modes of operation while controlling current in a bi-directional manner, all while maintaining IEEE 519 conditions on delivered power.

If the utility grid experiences inconsistency such as phase loss or a complete failure, the system will automatically sense the grid failure and will switch its control state accordingly. The patented UL certified design is capable of automatically disconnecting in a sub-cycle time frame from the utility grid and creating a seamless power transfer from grid connected to grid isolated, and vice-versa. This capability keeps existing renewable inverters online when transitioning to islanded mode where the AutoLync™ controller will autonomously manage generators, PV sources, wind energy and battery reserves.





Parameter	Lync™ 250
DC	
Battery Techology	All types (BMS required)
Input Voltage Range	540 - 800 VDC
Maximum Input Current	431 A
Enclosure	
Dimensions (W x L x H)	65 x 87 x 77 in
Weight	4200 lbs
Rating	NEMA 3R
Environmental	
Temperature Operating Range	0° - 40°C
Derated Power @ 40° - 50°C	170 kVA
Communications & Controls	
Supported Protocols	Modbus TCP or 485, CANbus, DNP3, SCADA
HMI Panel	Standard
Certifications	
UL 1741, UL 1741 SA, CSA 22.2, IEEE 154	7, IEEE 2030.5 compliant



#### Saft

26 quai Charles Pasqua 92300 Levallois-Perret - France Tel: +33 1 58 63 16 00 Fax: +33 1 58 63 16 18

#### **Go Electric**

1920 Purdue Parkway Suite 400 Anderson, Indiana - USA Tel.: 765-400-1347

www.saftbatteries.com www.goelectricinc.com

