solaredge

StorEdge™ Single Phase Solutions for North America

STOREDGE™

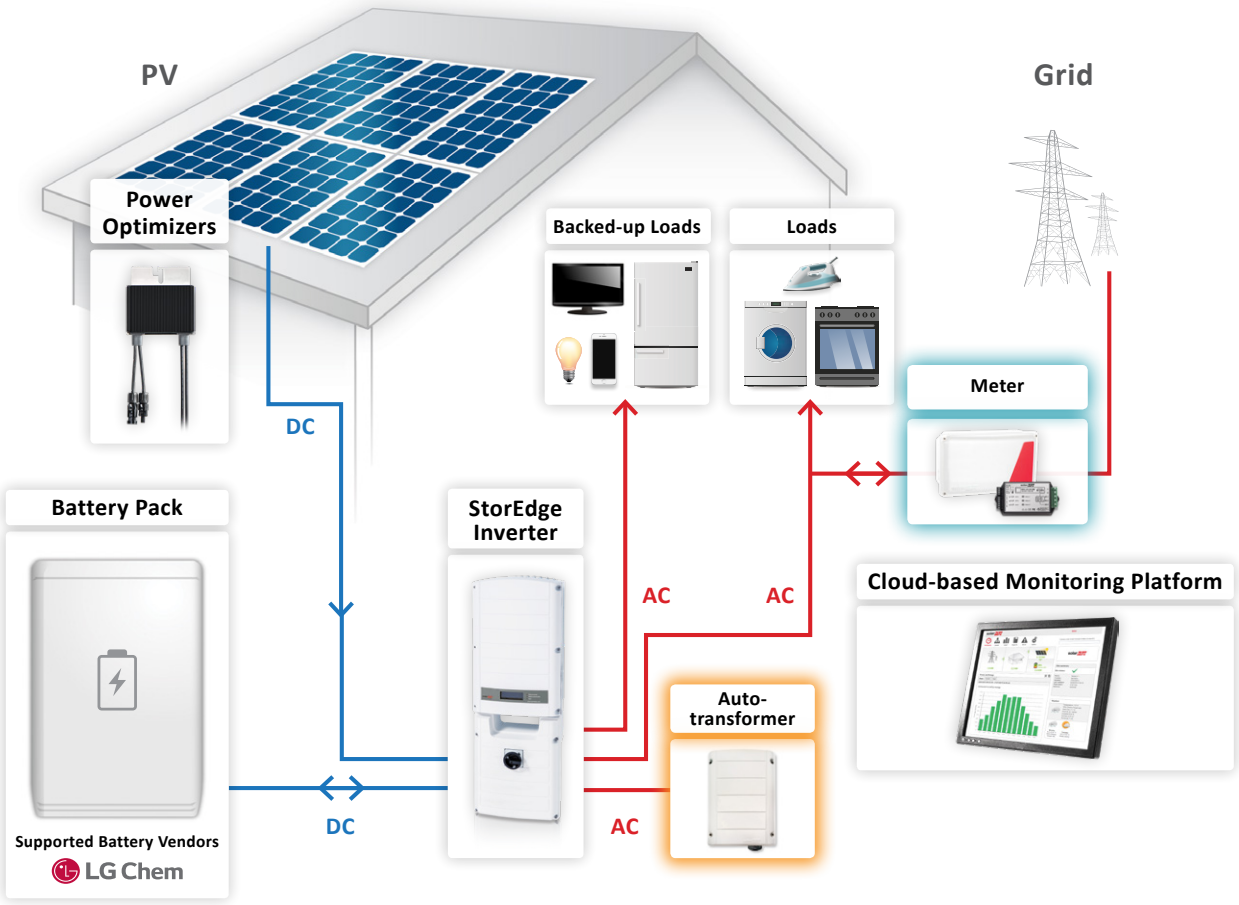
StorEdge™ Solutions Benefits:

- **More Energy** - DC-coupled architecture stores PV power directly to the battery without AC conversion losses
- **Simple Design & Installation** - single inverter for PV, battery storage, grid-tied and backup applications
- **Enhanced Safety** - no high voltage during installation, maintenance or firefighting
- **Full Visibility** - monitor battery status, PV production, remaining backup power and self-consumption data

StorEdge™ Single Phase Solutions for North America

StorEdge™ Features:

- Smart Energy Management - export control, time-of-use shifting, maximized self-consumption, demand response and peak shaving capabilities
- Backup power - automatically provides power to backed-up loads in the event of grid interruption
- All-in-one solution uses a single DC optimized phase inverter to manage and monitor both PV generation and energy storage
- Compatible with the LG Chem RESU battery



SolarEdge StorEdge™ Solutions for North America - Product Selector				
	Grid-tied solar, backup power and smart energy management	Grid-tied solar and backup power	Grid-tied solar and smart energy management	
StorEdge Single Phase Inverter	✓	✓	✓	
Auto-transformer	✓	✓		
Energy Meter	✓		✓	
Battery	✓	✓	✓	

StorEdge™ Single Phase Inverter
for North America SE3800A-US[1], SE7600A-US [1]

- Single inverter for PV, grid-tied storage and backup power
- Includes the hardware required to provide automatic backup power to backed-up loads in case of grid interruption
- Includes all interfaces needed for battery connection
- UL1741 SA certified, for CPUC Rule 21 grid compliance

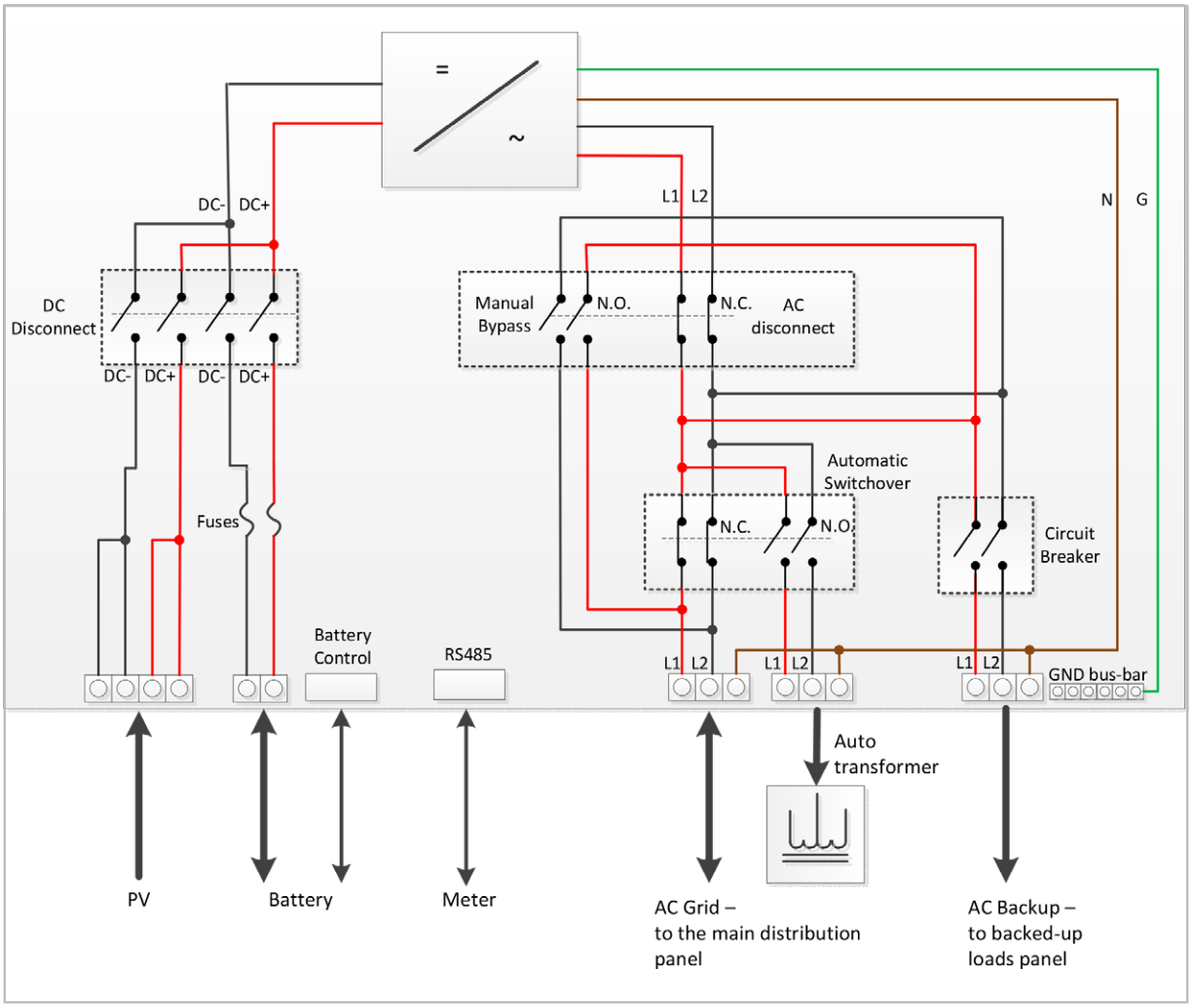
	SE3800A-US	SE7600A-US	
OUTPUT - AC (LOADS/GRID)			
Rated AC Power Output	3800	7600	VA
Max AC Power Output	4175	8350	VA
AC Output Voltage Min-Nom-Max (L-L)[2]	211-240-264		Vac
AC Frequency Min-Nom-Max [2]	59.3 - 60 - 60.5		Hz
Maximum Continuous Output Current @240V	16	32	A
GFDI	1		A
Utility Monitoring, Islanding Protection, Country Configurable Thresholds	Yes		
Charge Battery from AC (if Allowed)	Yes		
THD	<3		%
Typical Nighttime Power Consumption	<5		W
OUTPUT - AC (BACKUP POWER)[3]			
Rated AC Power Output	5000[4]		VA
Max AC Power Output - Surge (for 10 seconds)	7000[4]		VA
AC Output Voltage Min-Nom-Max (L-L)	211-240-264		Vac
AC Output Voltage Min-Nom-Max (L-N)	105-120-132		Vac
AC Frequency Min-Nom-Max	55 - 60 - 65		Hz
Maximum Continuous Output Current @240V - Backup Mode	21		A
Max Continuous Output Current per Phase @120V	25		A
GFDI	1		A
AC Circuit Breaker	Yes		
THD	<5		%
Automatic switchover time	<2		sec
INPUT - DC (PV and BATTERY)			
Transformer-less, Ungrounded	Yes		
Max Input Voltage	500		Vdc
Nom DC Input Voltage	400		Vdc
Reverse-Polarity Protection	Yes		
Ground-Fault Isolaton Detection	600kΩ Sensitvity		
Maximum Inverter Efficiency	98		%
CEC Weighted Efficiency	97.5		%
INPUT - DC (PV)			
Maximum DC Power (STC)	5100	10250	W
Max Input Current[5]	13	23	Adc
2-pole Disconnection	Yes		
INPUT - DC (BATTERY)			
Supported Battery Types	LG Chem RESU10H		
Number of Batteries per Inverter	1 or 2[6]		
Continuous Power	5000		W
Peak Power	7000		W
Max Input Current	17.5		Adc
2-pole Disconnection	Yes		
DC Fuses on Plus and Minus	25A (field replaceable)		
ADDITIONAL FEATURES			
Supported Communication Interfaces	RS485 for battery, RS485, Ethernet, Cellular, ZigBee (optional)		
Revenue Grade Data, ANSI C12.20	Optional[7]		
Integrated AC, DC and Communication Connection Unit	Yes		
AC Disconnect	Yes		
Manual Inverter Bypass Switch	Yes		
DC Voltage Rapid Shutdown (PV and Battery)	Yes, according to NEC 2014 and 2017 690.12[8]		
Auto-transformer thermal protection	Yes		

[1] **These specifications apply to inverters with part numbers SExxxxA-USS2 and connection unit model number BCU-1PH-USS**
[2] For other regional settings please contact SolarEdge Support
[3] Not designed for standalone applications and requires AC for commissioning
[4] The rated AC power output is the minimum between the AC Power Output and the battery continuous peak power
[5] A higher current source may be used; the inverter will limit its input current to the values stated
[6] When connecting two LG Chem batteries, each battery must have a different part number; supporting SolarEdge firmware required
[7] Revenue grade inverter P/N: SExxxxA-USS2xxxYx or SExxxxA-USS2xxxMx
[8] In case the inverter is not located in an accessible location for emergency responders (according to NEC 2017), use inverters with P/N SExxxxA-USS2Rxxxx ; for more information refer to: https://www.solaredge.com/sites/default/files/storedge_backup_installation_guide_NA.pdf

StorEdge™ Single Phase Inverter
for North America SE3800A-US, SE7600A-US

	SE3800A-US	SE7600A-US	
STANDARD COMPLIANCE			
Safety	UL1741, UL1741 SA, UL1699B, UL1998, UL9540,CSA 22.2		
Grid Connection Standards	IEEE1547, Rule 21, Rule 14H		
Emissions	FCC part15 class B		
INSTALLATION SPECIFICATIONS			
AC Output (Loads/Grid) conduit size / AWG range	1" / 14-6 AWG		
AC Output (Backup) conduit size / AWG range	0.75-1" knockouts / 14-6 AWG		
AC Input (Auto-transformer) conduit size / # of Strings / AWG range	0.75-1" / 14-6 AWG		
DC Input (PV) conduit size / AWG range	0.75" / 1-2 Strings 14-8 AWG		
DC Input (Battery) conduit size / AWG range	0.75" / 12-10 AWG		
Dimensions with Connection Unit (HxWxD)	37 x 12.5 x 7.2 / 940 x 315 x 184		in / mm
Weight with Connection Unit	58.5 / 26.5		lb / kg
Cooling	Natural convection and internal fan (user replaceable)		
Noise	<50		dBA
Min - Max Operating Temperature	-13 to +140 / -25 to +60		˚F / ˚C
Protection Rating	NEMA 3R		

Inverter Interface



SolarEdge Auto-transformer

SEAUTO-TX-5000

	SEAUTO-TX-5000	
ELECTRICAL RATINGS		
Rated Power - Continuous	5000	VA
Rated Power - Peak	7600 for 10sec	VA
Output Voltage	120/240V Split Phase	
Max Continuous Output Current per Phase @120V	25	A
Split Phase Imbalance (@Rated Power)	Yes, up to 25A difference between phases	
Thermal Protection	Yes	
INSTALLATION SPECIFICATIONS		
AC Output conduit size / AWG range	0.75" / 14-6 AWG	
Dimensions (HxWxD)	6.7 x 7.9 x 5.5 / 170 x 200 x 140	in / mm
Weight	29.7 / 13.5	lb / kg
Min - Max Operating Temperature	-13 to +140 / -25 to +60	°F / °C
Protection Rating	NEMA 3R	
Installation	Wall mounted	

Energy Meter for North America

SE-MTR240-0-000-S2

For meter specifications refer to: https://www.solaredge.com/sites/default/files/se_electricity_meter_na.pdf