



SolarEdge Single Phase StorEdge™ Solutions for North America



STOREDGE™

SolarEdge StorEdge™ Solutions Benefits:

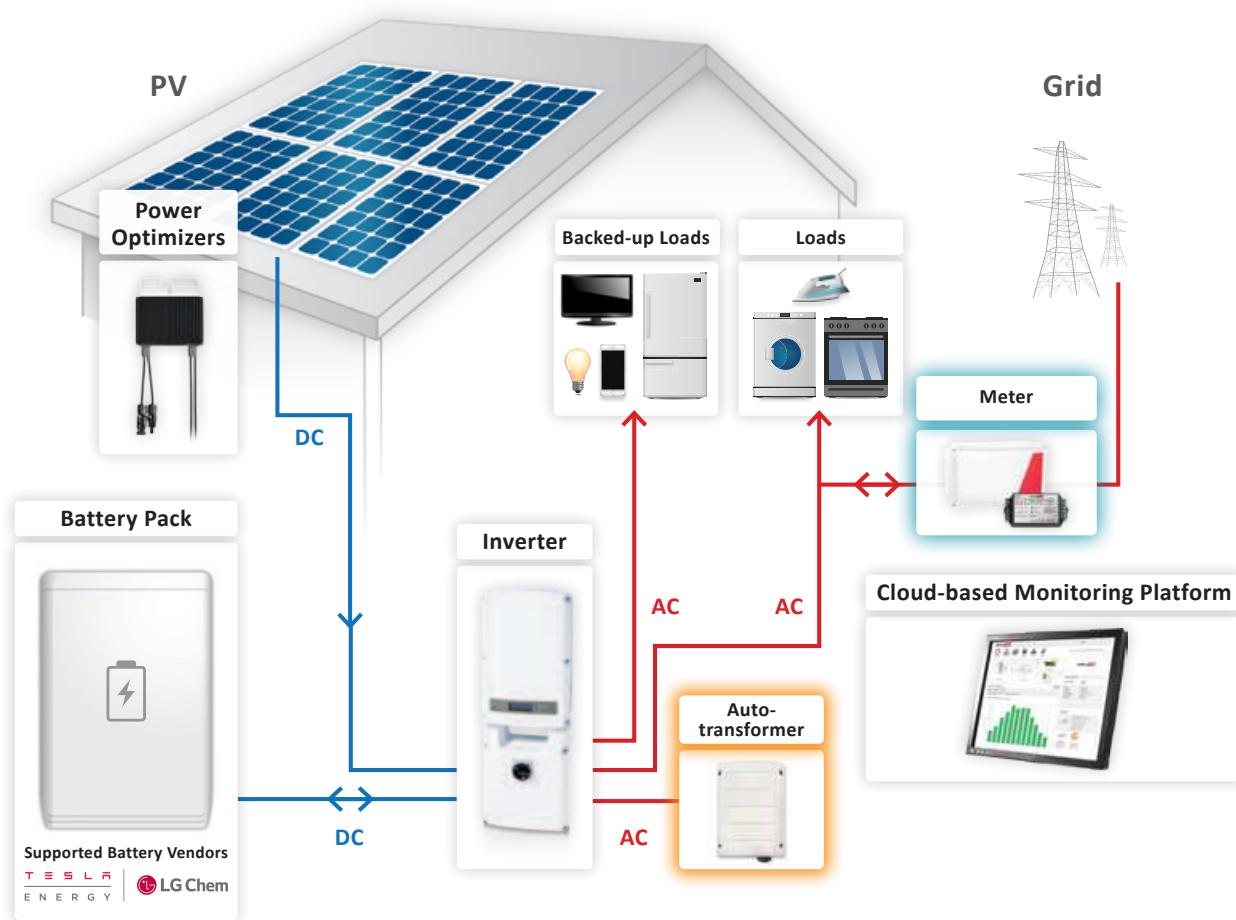
- **More Energy** - DC-coupled architecture stores PV power directly to the battery without AC conversion losses
- **Simple Design & Installation** - single inverter for PV, battery storage, grid-tied and backup applications
- **Enhanced Safety** - no high voltage during installation, maintenance or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



SolarEdge Single Phase StorEdge™ 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 Tesla Powerwall Home Battery and the LG Chem RESU.



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	
Single Phase StorEdge™ Inverter	✓	✓	✓	
Auto-transformer	✓	✓		
SolarEdge Electricity Meter	✓		✓	
Battery	✓	✓	✓	



SolarEdge Single Phase StorEdge Inverter for North America 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

	Lower Power Output		Higher Power Output		
OUTPUT - AC (LOADS/GRID)					
Rated AC Power Output			7600		VA
Max AC Power Output			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			32		A
GFDI			1		A
Utility Monitoring, Islanding Protection, Country Configurable Thresholds			Yes		
Charge Battery from AC (if Allowed)			Yes		
THD			<3		%
Power factor with rated power			>0.99 (configurable; 0.9 leading to 0.9 lagging)		
Typical Nighttime Power Consumption			<5		W
OUTPUT - AC (BACKUP POWER) ⁽³⁾					
Rated AC Power Output			5000 ⁽⁴⁾		VA
Max AC Power Output - Surge			6600 ⁽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		%
Power factor with rated power			0.2 leading to 0.2 lagging		
Automatic switchover time			<2		sec
Typical Nighttime Power Consumption			<5		W
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 Isolation Detection			600kΩ Sensitivity		
Maximum Inverter Efficiency			98		%
CEC Weighted Efficiency			97.5		%
INPUT - DC (PV)					
Maximum DC Power (STC)			10250		W
Max Input Current ⁽⁵⁾			23		Adc
2-pole Disconnection			Yes		
INPUT - DC (BATTERY)					
Continuous Peak Power	3300		6600		W
Number of Batteries per Inverter	1	2 for high capacity	1	2 for high power and high capacity	
Supported Battery Types	Tesla Powerwall 1	Tesla Powerwall 1	LG Chem RESU10H	Tesla Powerwall 1 (any combination other than B+B)	
Max Input Current	8.5		17.5		Adc
2-pole Disconnection			Yes		
DC Fuses on Plus and Minus	12A (field replaceable)		25A (field replaceable)		
ADDITIONAL FEATURES					
Supported Communication Interfaces	RS485 for battery, RS485, Ethernet, ZigBee (optional)				
Battery Power Supply	Yes, 12V / 53W				
Revenue Grade Data, ANSI C12.1	Optional ⁽⁶⁾				
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				
Auto-transformer thermal protection	Yes				

⁽¹⁾ These specifications apply to inverters with part numbers SE7600A-USS2XXXX 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

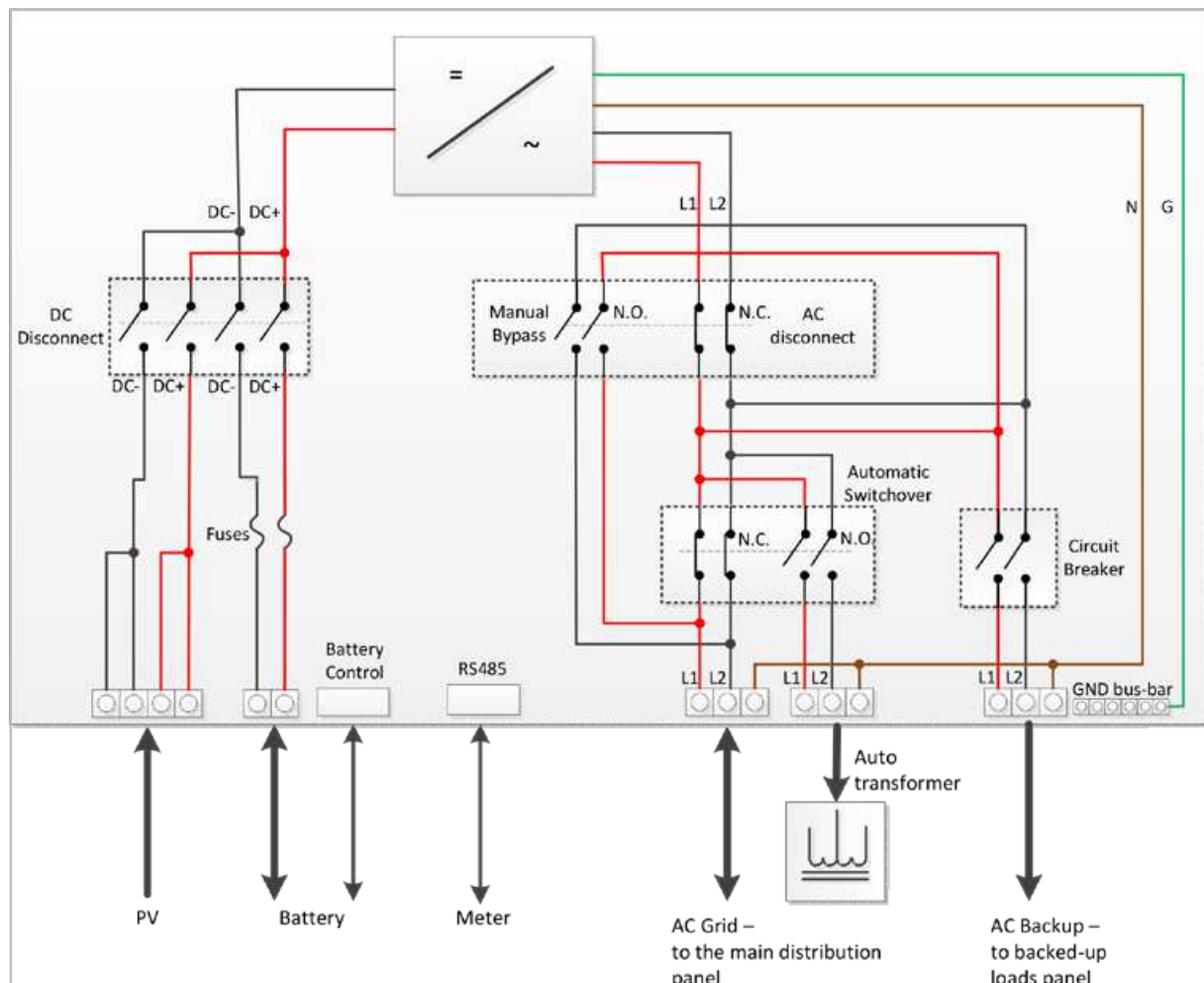
⁽⁶⁾ Revenue grade inverter P/N: SE7600A-USS20NNM2



SolarEdge Single Phase StorEdge Inverter for North America SE7600A-US

	Lower Power Output	Higher Power Output	
STANDARD COMPLIANCE			
Safety	UL1741, UL1699B, UL1998, CSA 22.2		
Grid Connection Standards	IEEE1547, Rule 21, Rule 14		
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 / AWG range	0.75-1" / 14-6 AWG		
DC Input (PV) conduit size / AWG range	0.75" / 14-8 AWG		
DC Input (Battery) conduit size / AWG range	0.75" / 16-10 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	



SolarEdge Electricity Meter for North America

SE-MTR240-2-200-S1 / SE-MTR240-2-400-S1

For meter specifications refer to: http://www.solaredge.us/files/pdfs/products/se_electricity_meter_na.pdf

