



SolarEdge Single Phase StorEdge™ Solutions for North America



STOREDGE™

SolarEdge StorEdge™ Solutions Benefits:

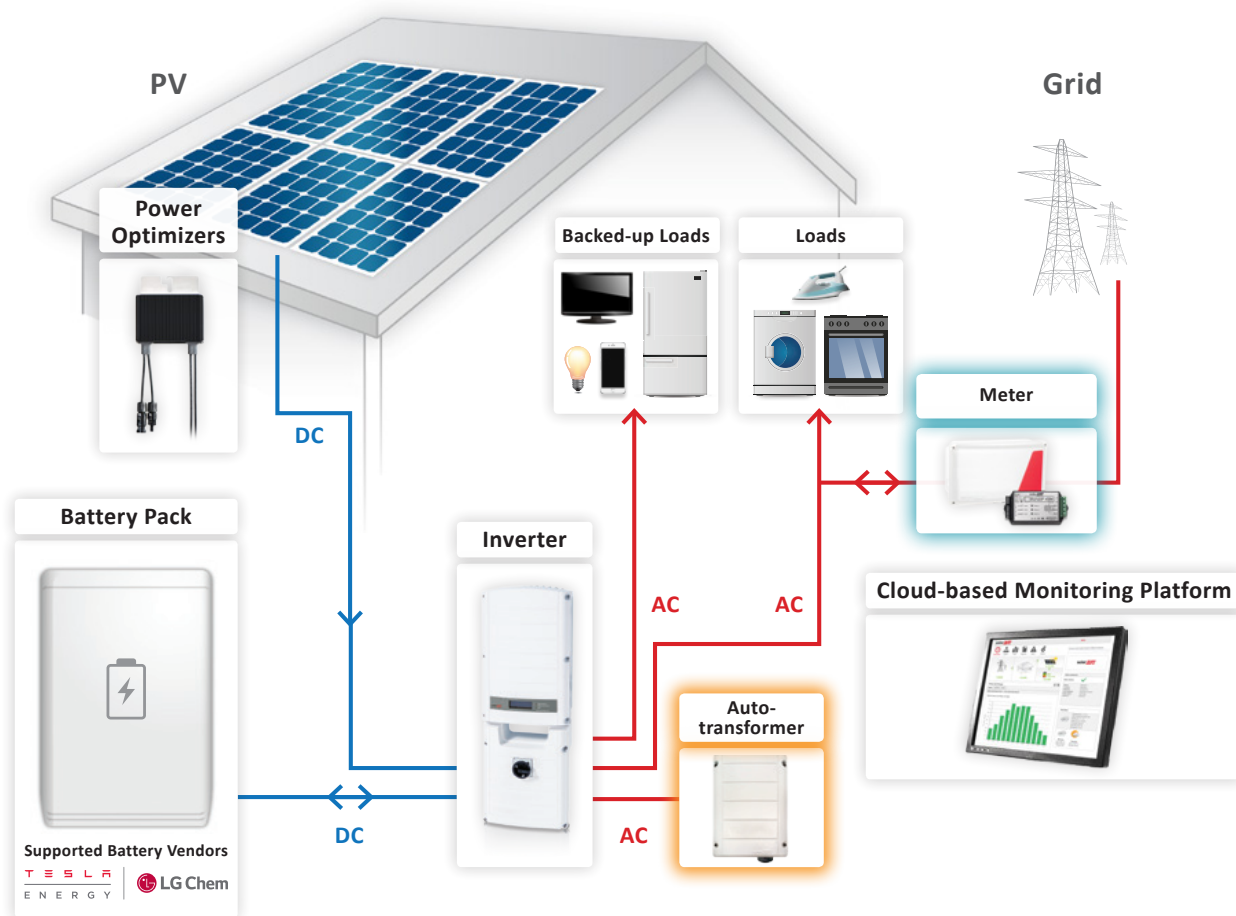
- **More Energy** - DC-coupled architecture stores PV power directly to the battery without AC conversion losses
- **Simple Design & Installation** - single inverter for PV, battery storage, grid-tied and backup applications
- **Enhanced Safety** - no high voltage during installation, maintenance or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

SE7600A-US		
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	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	600k Ω 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	W
Number of Batteries per Inverter ⁽⁶⁾	1	2 for high capacity
Supported Battery Types	LG Chem RESU 10H Tesla Powerwall 1	Tesla Powerwall 1
Max Input Current	8.5	Adc
2-pole Disconnection	Yes	
DC Fuses on Plus and Minus	12A (field replaceable)	
ADDITIONAL FEATURES		
Supported Communication Interfaces	RS485 for battery, RS485, Ethernet, ZigBee (optional)	
Battery Power Supply	Yes, 12V / 53W	
Revenue Grade Data, ANSI C12.20	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 690.12	
Auto-transformer thermal protection	Yes	

⁽¹⁾ These specifications apply to inverters with part numbers SE7600A-US0XXXXX 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 5000VA 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⁾ For two batteries for double power contact SolarEdge technical support

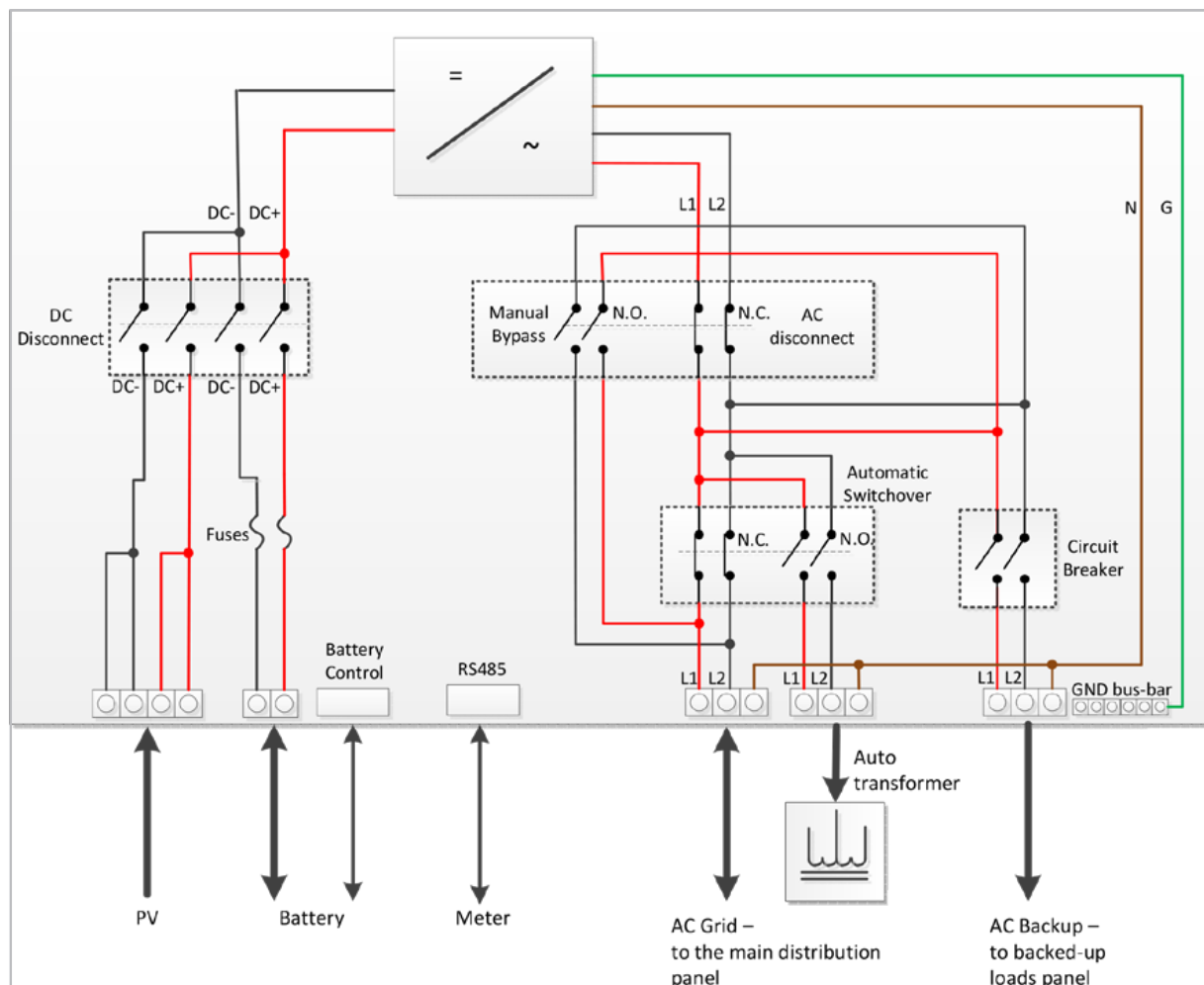
⁽⁷⁾ Revenue grade inverter P/N: SE7600A-US02NNG2



SolarEdge Single Phase StorEdge Inverter for North America SE7600A-US

SE7600A-USS		
STANDARD COMPLIANCE		
Safety	UL1741, UL1699B, UL1998, UL9540, 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 / # of Strings / AWG range	0.75" / 1-2 Strings 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-MTR240-0-000-S2

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



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