



SolarEdge Single Phase StorEdge™ Solutions for North America



STOREDGE™

SolarEdge StorEdge™ Solutions Benefits:

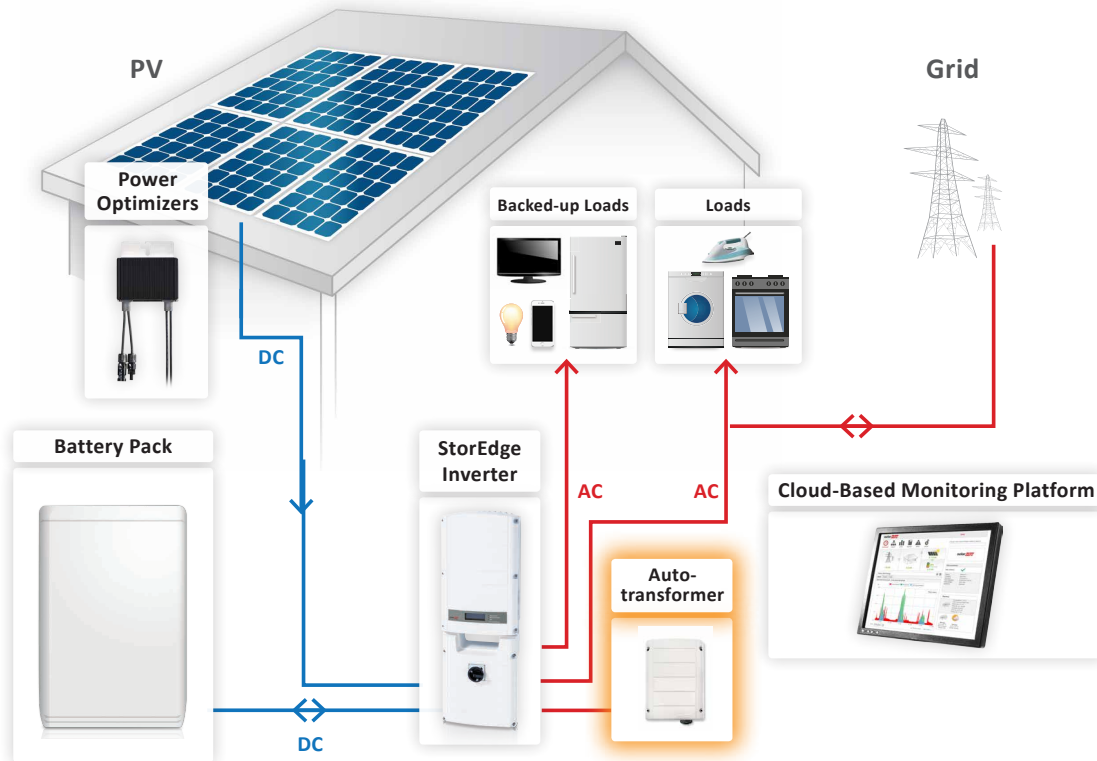
- **More Energy** - DC-coupled architecture stores PV power directly to the battery without AC conversion losses
- **Simple Design & Installation** - single inverter for both PV and storage backup and grid-tied applications
- **Enhanced Safety** - no high voltage or current during installation, maintenance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

- All-in-one solution uses a single DC optimized inverter to manage and monitor both PV generation and energy storage
- Backup power - automatically provides power to backed-up loads in the event of grid interruption
- Smart Energy Management - export control, time-of-use shifting, maximized self-consumption, demand response and peak shaving capabilities
- Controls third-party batteries such as the Tesla home battery, the Powerwall



Supported batteries



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-USS

- 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-USS		
OUTPUT - AC (LOADS/GRID)		
Rated AC Power Output	7600	VA
Max AC Power Output	8350	VA
AC Output Voltage Min-Nom-Max (L-L) ⁽¹⁾	211-240-264	Vac
AC Frequency Min-Nom-Max ⁽¹⁾	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)⁽²⁾		
Rated AC Power Output	5000 ⁽³⁾	VA
Max AC Power Output - Surge	7600 for 10sec	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 ⁽⁴⁾	23	Adc
2-pole Disconnection	Yes	
INPUT - DC (BATTERY)		
Continuous Peak Power	3300	W
Number of Batteries per Inverter ⁽⁵⁾	Up to 2, for double capacity	
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 C12.1	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 690.12	
Auto-transformer thermal protection	Yes	

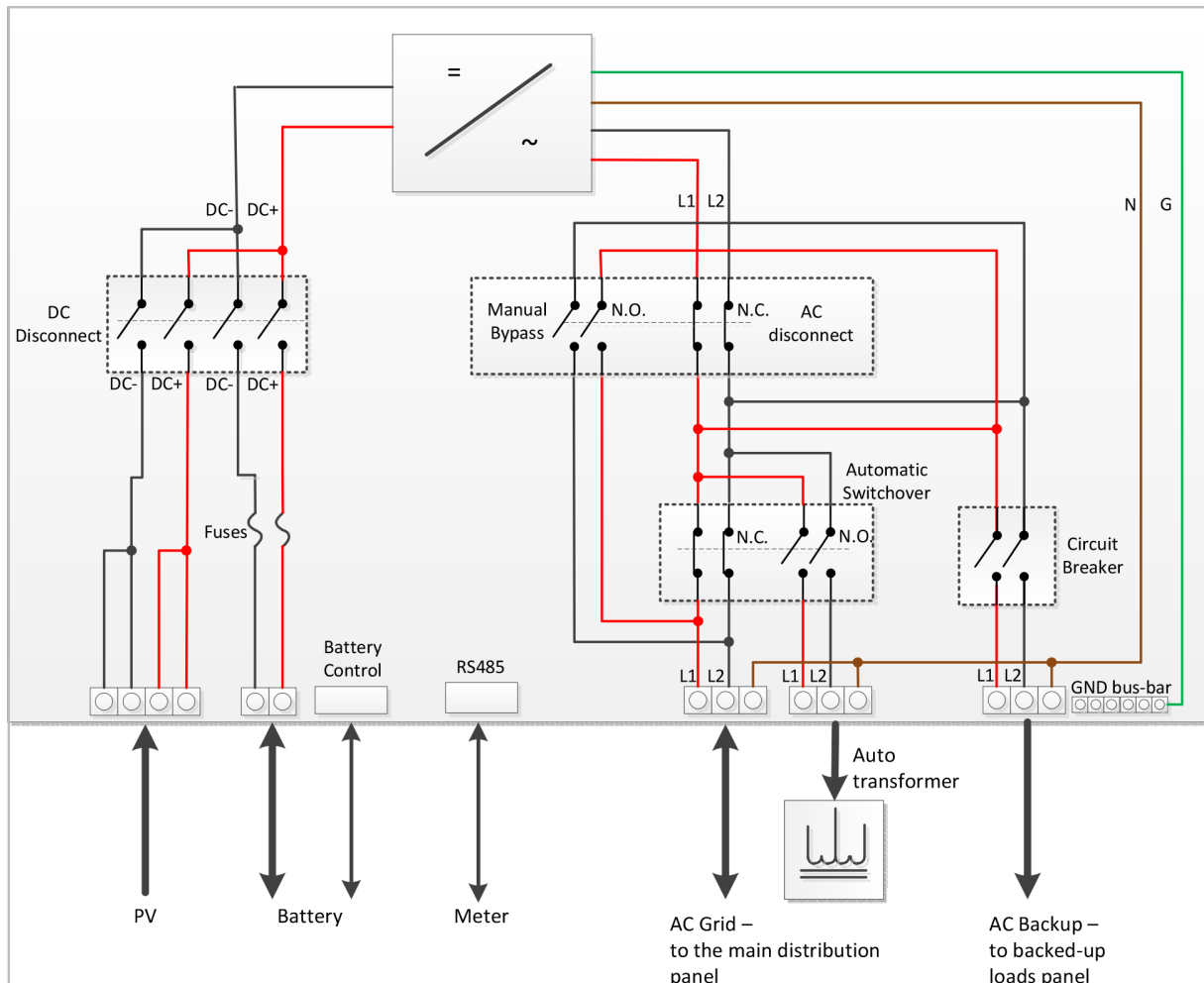


SolarEdge Single Phase StorEdge Inverter for North America SE7600A-USS

SE7600A-USS		
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	

(1) For other regional settings please contact SolarEdge Support.
 (2) Not designed for standalone applications and requires AC for commissioning.
 (3) The rated AC power output is the minimum between 5000VA and the battery continuous peak power.
 (4) A higher current source may be used, the inverter will limit its input current to the values stated.
 (5) For two batteries for double power contact SolarEdge.
 (6) Revenue grade inverter P/N: SE7600A-USS02NNM2.

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

